

Monitoring of Outcomes From Oregon's Federal Forest Health Program

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Executive summary

There has been focused investment from the USDA Forest Service (USFS), the State of Oregon, local governments, and others to increase the quality and pace and scale of forest restoration on national forests in eastern Oregon. The USFS expanded planning capacity, especially in the Blue Mountains. The Oregon legislature, through the Oregon Department of Forestry (ODF), devoted \$2.88 million in the 2013–2015 biennial budget. This funding became the “Federal Forest Health Program” (FFH) within ODF and was organized into three focal areas for targeted investment: a) State/Federal Implementation Partnership, b) Collaborative Capacity Grants, and c) Technical Assistance and Science Support for collaborative efforts. To gauge effectiveness of these increased investments, the Federal Forest Working Group (FFWG; formerly the Federal Forest Advisory Committee) facilitated the development of a list of performance measures to gauge the success of the State’s invest-

ment. The FFWG is convened by the Governor’s Natural Resource Office and comprised of a number of stakeholders from private businesses, non-governmental organizations (NGOs), and state and federal agencies. The performance measures for the FFH Program in the 2013–2015 biennium cover six themes: treatment activities, timber supply, economic impact, collaborative capacities, NEPA appeals and objections, and administrative efficiency. In this report, we compare the conditions of those performance measures between baseline years (2009–2011) and investment years (2012–2014). Most of our reporting covers the four Blue Mountains national forests (Wallowa-Whitman, Umatilla, Malheur, and Ochoco). One condition of the Oregon Legislature for supporting the FFH budget package was an increase in federal funds invested by the USFS. As such, the measures reported here are in response to the cumulative state and federal investments unless noted otherwise.

Key results from this analysis include:

The number of restoration jobs supported annually in eastern Oregon increased 16.2 percent from restoration projects on Blue Mountains national forests between the periods 2009–2011 and 2012–2014. Across eastern Oregon, annual business sales increased 38.3 percent to an average of \$179.3 million during the FFH Program years. State investments in the State/Federal Implementation Partnership supported 19 jobs and generated \$2.1 million in economic activity in eastern Oregon.

Collaboratives in the Blue Mountains region are beginning to have clear on-the-ground impacts. Records of Decision were signed by the USFS on 137,487 acres of collaborative projects within the Blue Mountains region from 2012–2014 and collaboratives worked on planning an additional 465,356 acres. The 137,487 acres of signed collaborative projects were on the Malheur and Ochoco national forests. Implemented collaborative projects on the Malheur National Forest yielded approximately 156.8 mmbf in timber sales. A reassessment of collaborative impacts within a year would likely provide more comprehensive accounting of collaborative outcomes on all four national forests, as several more projects would be completed.

Changes in the number of acres treated depended on the type of restoration activity. Restoration activities such as pile burning and commercial sales increased over the period whereas others such as invasives treatment and tree planting remained flat. Interpretation of the treatment activity was also confounded by influences from the ARRA.

The timber volume sold annually from Blue Mountains national forests increased 13 percent between the baseline and FFH Program years. This is particularly true of the sawlog volume, which increased 58 percent. Because of the increases in the timber volume sold, economic activity also increased through direct effects from employment in the woods and mills, as well as secondary effects from employment with servicers and suppliers and in general sector jobs.

There is no definitive result regarding the significance or impact of objections and appeals during the FFH Program. The percentage of NEPA objections increased, but this was because of a decline in the overall number of NEPA documents completed. The total number of objections was flat throughout the six years considered.

To date, the capacity of collaboratives in the Blue Mountains region to work at increased pace and scale and on issues of complexity is linked to their maturity and the level of USFS investment. Where collaboratives are working at larger spatial scales, there has been additional investment by the USFS in its own planning capacity. All groups are working on complex issues, including active management in inventoried roadless areas and riparian areas, management needs for moist mixed-conifer forests; and relationships between roads and wildlife, and roads and water. The three newer collaboratives have yet to achieve agreement on many or any of these issues. Levels of trust are varied in the five groups, reflecting less experience working together as well as the time it takes to build new relationships after transitions in key stakeholders and staff. Changes or lack thereof in these indicators are not solely the result of collaboratives, but also to USFS capacity.



Introduction

The goals of the Federal Forest Health (FFH) Program, funded by the Oregon Legislature and administered by the Oregon Department of Forestry (ODF), are to enhance economic opportunities for local communities and improve forest resilience. During the 2013–2015 biennium, the geographic extent of the FFH Program included all the “dry-side” national forests of eastern Oregon and a portion of southwestern Oregon. The FFH Program is guided by two main objectives:

1. Accelerate the effectiveness of local collaboratives to increase the scale of forest restoration by providing technical assistance, science support, and capacity funding to leverage existing successes;
2. Develop and test a new business model for federal/state partnership to increase the pace of forest restoration that leverages resources, advances planning and implementation efficiencies, and increases restoration activities.

To achieve these objectives, the funding package included three targeted investments: 1) *Collaborative Capacity Grants*, 2) *Technical Assistance and Science Support*, and 3) *State/Federal Implementation Partnership*.

The *Collaborative Capacity Grants* were competitively awarded by the Oregon Watershed Enhancement Board (OWEB). The grants, awarded directly to forest collaborative groups, were to maintain and grow their capacity for accelerated restoration. Grant guidelines specify that funds are to be used to advance agreement on an identified geographically specific restoration project for facilitation, organizing meetings and field tours, covering travel costs, monitoring and evaluation of restoration treatments, and communication. Grant funds were not provided for on-the-ground treatments. The grants “were designed to address forest collaborative organizational needs that, when satisfied, will achieve specific performance criteria that were established to track the progress and extent to which the pace and scale of forest health treatments and participating organizations attain their planning and implementation goals.”¹

Technical Assistance and Science Support (TASS) is being implemented through competitively awarded contracts administered by ODF. These contracts provided funding for regional organizations to partner with collaborative groups on data collection and analysis for the development of landscape scale strategies and monitoring of ecological, social, and economic outcomes. The TASS contractors worked with individual collaborative groups across Oregon to identify needs and useful products. Further information on TASS projects and outcomes is detailed later in this report.

The *State/Federal Implementation Partnership (SFIP)* is a joint effort between ODF and the USDA Forest Service (USFS) with the goal of developing a New Business Model to increase the pace and scale of federal forest management and restoration projects. The SFIP is focused on approaches to achieving restoration needs, timber supply, and efficiencies in planning, implementation, and administration. Additionally, SFIP extended employment opportunities for seasonal ODF fire personnel, who would normally have been laid off at the end of the fire season, to work on pre-implementation efforts on USFS land. In developing this business partnership, ODF has adopted a two-tiered investment strategy. Recognizing that restoration projects can be delayed as a result of a lack of federal funding or staff capacity, the first-tier focuses on presale early implementation activities where National Environmental Policy Act (NEPA) analysis has been completed. The outcome of this strategy is to reduce the time between the completion of NEPA analyses and the offering of timber sales or service contracts for forest and watershed restoration. The second-tier focuses on pre-NEPA data collection and analyses. The outcome of this strategy is to increase the number of planning areas with completed NEPA processes. The SFIP investments are currently focused on the four national forests in the Blue Mountains region of Oregon.

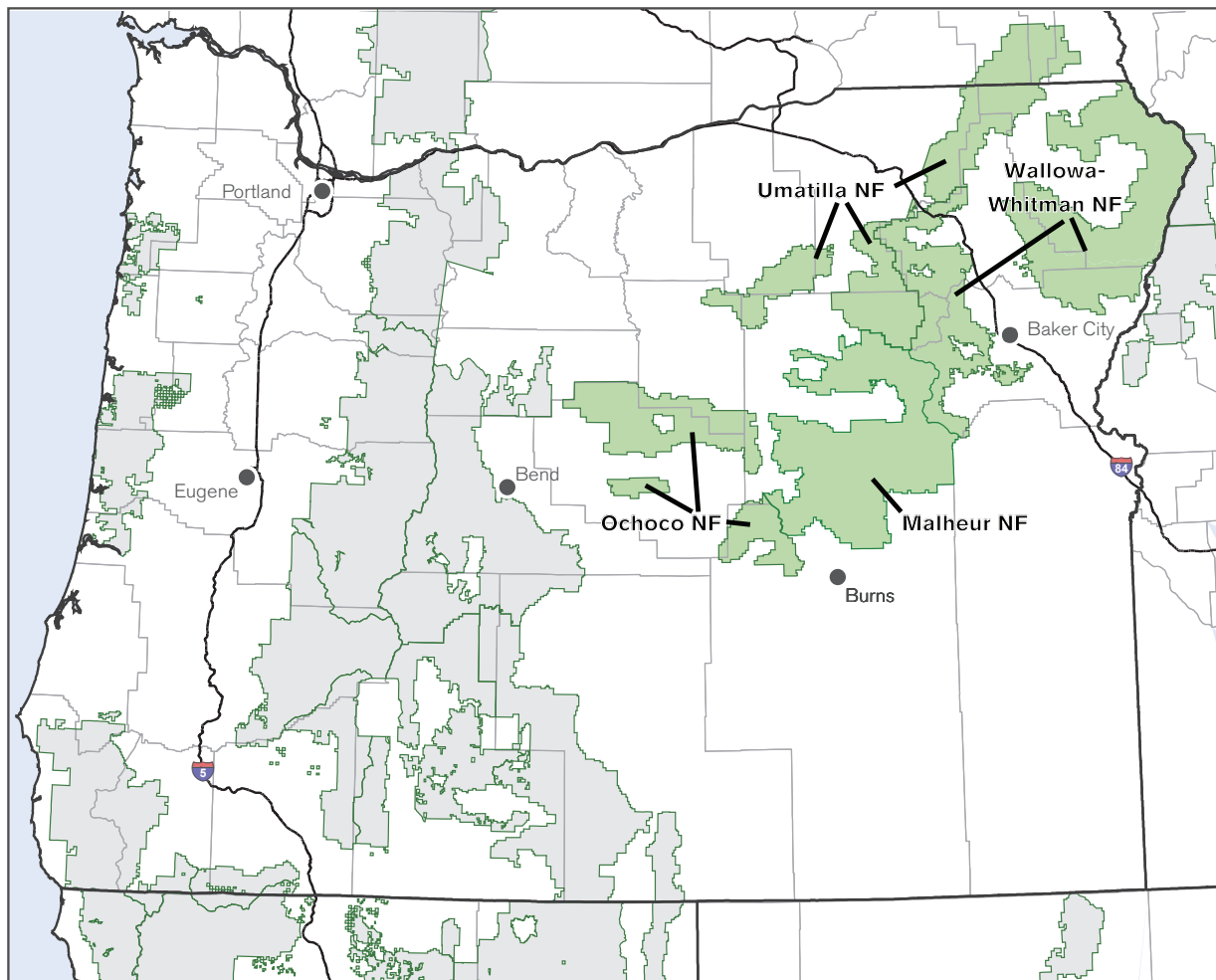
The Federal Forest Working Group (FFWG) facilitated the development of a list of performance measures to assess whether the State's FFH Program, in its entirety, achieved desired outcomes. The Ecosystem Workforce Program was contracted by

ODF to compare conditions in those performance measures for years before and after implementation of the FFH Program. The Ecosystem Workforce Program cooperated with ODF personnel to identify a list of indicators related to each FFWG performance measure. This report represents a broad look at the FFH Program investments and patterns in those performance measures as of the present time.

Many of the USFS projects that the FFH Program might influence are only now entering the implementation stage. The full effects of the FFH Program will likely be experienced over the next sev-

eral years. In the following section, we provide an overview of the specific investments made in each of the three focus areas. We then report on the outcomes of indicators developed in partnership with ODF to address the FFWG performance measures. The report concludes by summarizing the observed trends. Because the majority of the FFH Program investment has centered primarily on the Malheur, Ochoco, Umatilla, and the Wallowa-Whitman national forests, we focus most of our monitoring effort on those Blue Mountains national forests (see Figure 1, below).

Figure 1 Location of Blue Mountains national forests in eastern Oregon



Investments of the Federal Forest Health Program

Collaborative Capacity Grants

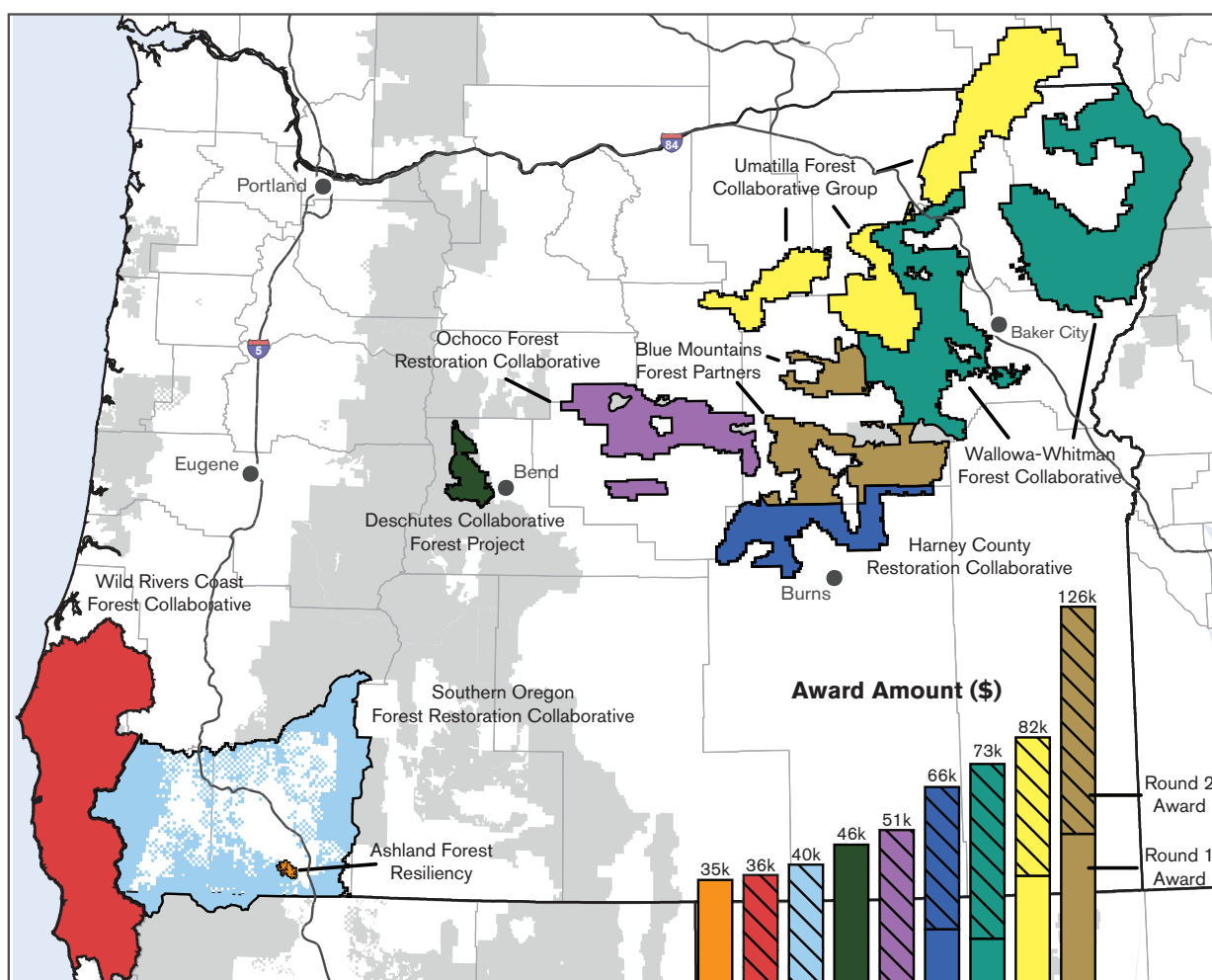
The FFH Program provided \$0.5 million for Collaborative Capacity Grants (CCG) administered by OWEB. Under the program, OWEB awarded funds to nine collaborative groups in two grant cycles (see Figure 2, below). Six grants were awarded in the first grant cycle (November 2013) totaling \$200,000 with individual grants ranging from \$15,000 to nearly \$50,000. A second grant cycle (June 2014) awarded \$352,623 to seven collaboratives. Matching funds from collaborative groups and other agencies brought the total investments to approximately \$1.3

million to support project planning and implementation on an estimated 1 million acres of national forests.

The success of these investments relies heavily on the ability of each collaborative to increase the quality and pace and scale of planning for restoration. Achieving this objective largely depends upon gaining agreement among land management agencies, which officially plan and implement the projects, and other collaborative stakeholders. For this report, we define accelerated restoration as working:

1. At larger spatial scales (both planning and treatment of acres),

Figure 2 Collaboratives receiving Collaborative Capacity grants from OWEB



2. On faster timelines (both planning and implementation), and
 3. On more socially or ecological complex issues.
- A more detailed description of collaborative capacity within the Blue Mountains and the CCG outcomes begins on page 23.

Technical Assistance and Science Support

The FFH Program allocated \$.7 million for TASS to increase the pace and scale of collaboratively developed restoration projects. ODF awarded contracts to five entities to address generalized needs of collaboratives (see Table 1, below). Contractors developed specific scopes of work after consultation with collaborative groups.

At the time of this publication, contractors for TASS efforts are finishing their projects and will provide final products and individual contract reports at a later date. To complete the monitoring effort reported here before the end of the biennium, we worked with each TASS contractor to develop brief summaries of their work.

The Nature Conservancy

The Nature Conservancy (TNC) worked with project partners to provide science support to local forest collaborative groups involved with national forests in eastern and southwest Oregon. The collaboratives identified science needs and information gaps about the ecology and management of dry, fire-adapted forest systems. Results from TNC's TASS work helped the collaboratives assist the USFS in planning and implementing proposed restoration thinning projects. Ultimately, TNC assisted in developing seven science support projects for five collaborative groups working on four different national forests.

As one example of a science support project, TNC assisted Blue Mountains Forest Partners (BMFP) with a science synthesis of northern goshawks (*Accipiter gentilis*). Previously, the collaborative had struggled to understand and agree on how best to address the habitat needs and management of the northern goshawk in project areas with mechanical harvest and thinning. Specifically, questions persisted around the appropriate amount and spatial arrangement of cover and cover type to provide optimally in and around goshawk nesting

Table 1 Contracts awarded for technical assistance and science support

Organization	Elements of contracted work
Ecotrust	Development of communications materials including brochure and website update and hosting of workshop on developing communications messages.
Lake County Resource Initiative	Development of an NEPA template for forest management in the Lakeview Sustained Yield Unit.
Sustainable Northwest	Assist with development of financial management systems; assistance with development of collaborative agreements; Document preparation related to NEPA issues; Documentation of previous agreements and development of best practices; workshop on small diameter utilization; staff support and coordination for several collaborative efforts.
The Nature Conservancy	Assistance for the development of financial and project plans for several sites.
University of Oregon's Ecosystem Workforce Program	Assessment of workforce and contractor capacity; guide for conducting workforce assessments; and development of jobs calculators for new geographies.

areas. Blue Mountains Forest Partners requested science support to better understand the management needs and implications for these resources. The TASS funds allowed various partners, including researchers at Oregon State University (OSU), members of BMFP, the High Desert Museum and TNC to conduct research synthesis efforts designed to pull together a combination of local knowledge and peer-reviewed research to help inform BMFP about habitat needs for northern goshawks. Information from the synthesis will be used by BMFP to inform recommendations on forest thinning and restoration projects on the Malheur National Forest. The science synthesis on northern goshawks will subsequently be the focus of a regional workshop of collaborative partners throughout eastern Oregon.

During spring of 2014, the Pacific Northwest (PNW) Research Station, along with project partners (including TNC), engaged the Deschutes Collaborative Forest Project (DCFP) in designing research that

would describe historical conditions and disturbance regimes in dry and moist mixed-conifer forests west of Bend, Oregon. The goal of the research was to expand the zones of agreement in moist mixed-conifer forests where the historical range of variability is poorly understood. Specific objectives were to 1) record current structure and composition of distinct forest types to provide a framework for DCFP's development of future desired conditions, 2) determine forest stand histories, including description of the effects of logging and fire exclusion, and 3) determine how fire frequency and severity vary across the landscape.

The PNW Research Station began field research in summer 2014. The DCFP was invited into the field to learn the sampling procedures and develop a shared understanding of the research process. Sampling to understand stand and disturbance histories was completed at 77 sites providing a robust record of forest dynamics across a 20,000-acre landscape.



Preliminary results were presented in the field during fall 2014, and formal results were presented at monthly DCFP meetings from January to May 2015. Currently, the PNW Research Station is installing an additional 25 sample plots to expand the study into cool, wet mixed-conifer forests, and the DCFP is using the 2014 forest sampling data to develop management recommendations at the stand and landscape scale. This unique research partnership benefited the collaborative restoration process by: 1) creating a transparent research process that involved collaborative members from the start, 2) developing common language between the DCFP and USFS describing structure, composition, and landscape conditions, and 3) providing a framework for collaborative recommendations from the stand to landscape scale.

Sustainable Northwest

Along with subcontractors and project partners, Sustainable Northwest provided technical assistance to forest collaboratives to improve process and increase organizational capacity. These efforts included assisting in creation of a new forest collaborative on the Rogue River-Siskiyou and Mt. Hood national forests, planning and facilitating collaborative meetings and field tours to engage members of the collaboratives in USFS projects, assisting a collaborative in the planning of an economic development workshop focused on forest restoration projects, managing or assisting in the hiring processes for staff or facilitators to lead the collaboratives, and providing financial management assistance to increase fiscal oversight and management.

The technical assistance provided has led to increased capacity for forest collaboratives to facilitate meetings and lead the organizations forward to meeting their goals of forest restoration and economic development. The projects the collaboratives are working on during this time have taken less time to move through NEPA processes and the collaboratives have more structured management organizations with stronger administration committees and greater ability to track and report on finances.

University of Oregon Ecosystem Workforce Program

The Ecosystem Workforce Program (EWP) focused on several efforts to increase the ability of local contractors to capture work advertised in dry forests of Oregon. First, EWP worked with project partners to solicit input from forest collaboratives and community-based organizations to identify high-priority needs and develop projects for building contractor capacity.

Second, EWP worked with Wallowa Resources (WR) to assess the capacity of contractors in northeastern Oregon to meet increased demand for forest restoration services. In that assessment, EWP summarized USFS contracting activity in northeastern Oregon and detailed the past work of federal contractors in Grant, Union, and Baker counties over the last 10-years. Ecosystem Workforce Program worked with WR to develop an interview guide and identify contractors with experience in technical work such as project assessment, design, analysis, and planning to support NEPA, as well as unit layout and marking. Wallowa Resources interviewed 25 contractors, and EWP wrote a working paper summarizing results of interviews and the federal contracting history in northeastern Oregon.

Third, EWP worked with OSU to expand and refine existing tools to support forest collaboratives in their efforts to increase local benefit and jobs from forest restoration. From this effort, EWP revised and created several quick guides for supporting local contracting, planning a restoration jobs program, and learning about new contracting efforts and definitions. Ecosystem Workforce Program included these publications in a revised and updated web resource center for contractors and collaboratives. As part of this effort, EWP also provided technical assistance and coaching to the Lakeview Stewardship Collaborative Group. Finally, EWP expanded the Blue Mountains Restoration calculator to include all the dry forests of eastern and southern Oregon, and worked with SOFRC to develop two fact sheets that describe collaboratively developed restoration projects in southwest Oregon and their local and statewide economic impacts.

Ecotrust

Ecotrust has been supporting the work of a network of 15 forest collaboratives in Oregon to develop simple, accessible language and tools to both describe the work of the collaborative and their key role in forest restoration. These communications and marketing tools include web sites, brochures, and templates for the groups to use in the future to develop new communications materials. This support is helping advance the pace and scale of forest restoration by generating support from statewide policy makers and public forest stakeholders, including the conservation caucus and timber industry, and local communities.

In the first phase of their work, Ecotrust developed new websites for BMFP (bluemountainsforestpartners.org) and Southern Oregon Forest Restoration Collaborative (SOFRC) (sofrc.org) to help these groups more effectively manage their online presence as a means of engaging and educating their communities about their work. These sites, their design, and function will serve as a replicable model for other collaboratives interested in bolstering their web presence. Ecotrust also designed one- and four-page brochures for SOFRC to aid in their outreach efforts. In the second phase of their work, Ecotrust developed a generic two-page handout, a mailer, and a short video about forest collaboration and accelerated restoration—all built around broad messages and themes intended for use in collaborative websites, verbal communications, and marketing efforts.

Lake County Resources Initiative

Lake County Resource Initiative (LCRI) focused their efforts on increasing the amount of funding available for USFS project implementation by reducing the amount of money that is spent on project planning. Specifically, LCRI focused on three efforts to reduce the cost of planning and expand implementation. First, LCRI developed an environmental impact statement (EIS) template, using the USFS provided format, to help increase the pace and scale of restoration projects on the Fremont-Winema National Forest. This template will provide a model for integrated dry forest restoration objectives that typically include 1) creating more

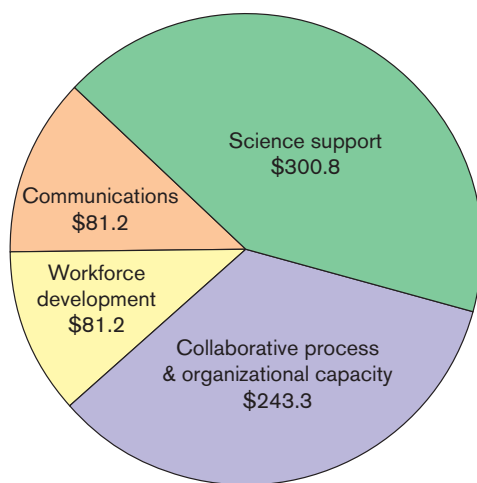
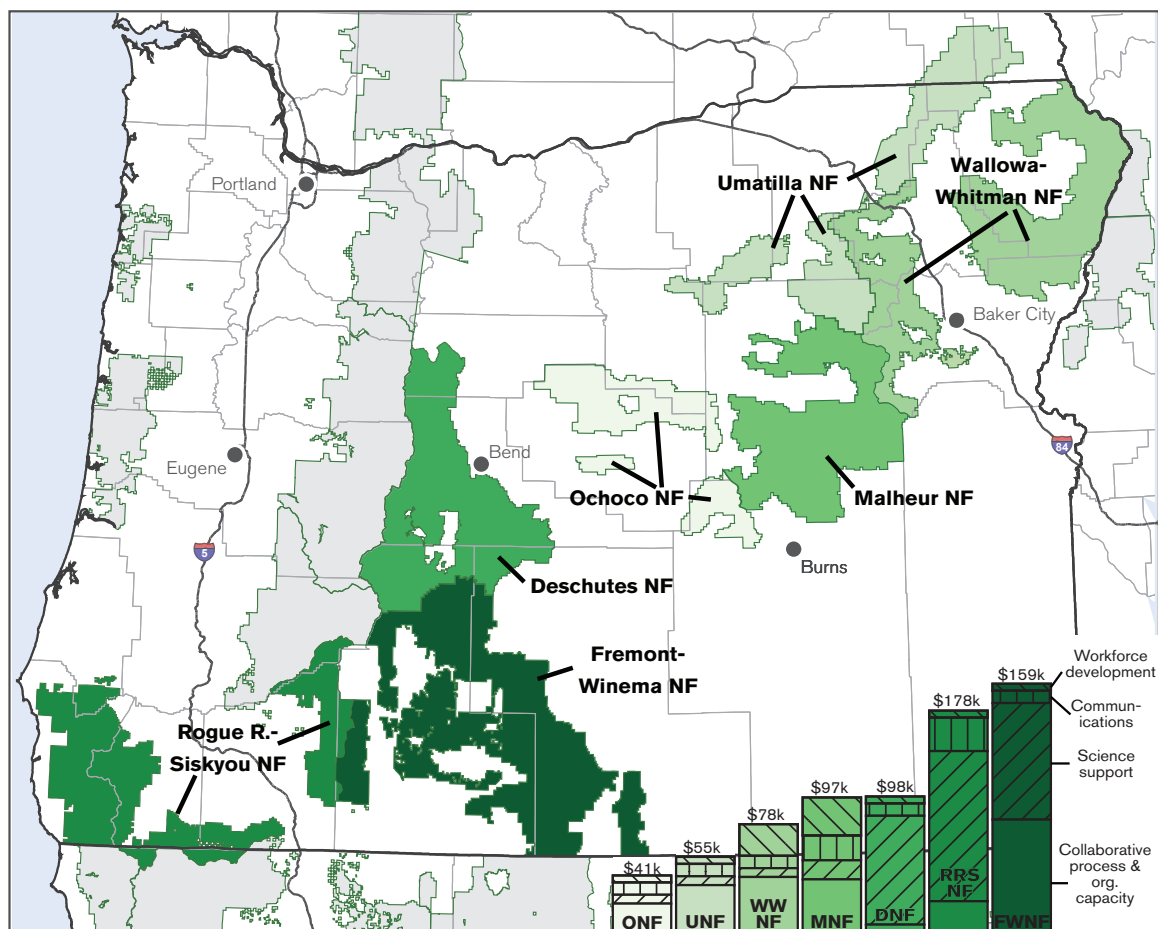
resilient landscapes that are resistant to natural disturbances, 2) restoring desired levels of ecosystem function by improving the composition, structure, spatial arrangement and ecological processes in existing forests, and 3) maintaining or improving riparian processes, providing diverse riparian vegetation and aquatic habitats. The EIS template is based on the most recent science in regards to landscape-level, dry forest restoration.

Second, LCRI worked in partnership with the Fremont-Winema National Forest, Collins Pine, TNC, and OSU, to design a study that evaluates the use and benefits of virtual boundaries during timber harvest operations. The Fremont-Winema National Forest has requested pilot authority for the use of virtual boundaries, which may help reduce the cost of marking boundaries with a crew by using recent technologies. Third, LCRI is assisting the Fremont-Winema National Forest in landscape-scale planning. The trial for this will be a 100,000 acre plan and NEPA analysis within the Lakeview Federal Sustained Yield Unit.

Distribution of Technical Assistance and Science Support

TASS funding was allocated primarily to science support (42 percent of total) and technical assistance for collaborative process and organizational capacity (34 percent of total) (see Figure 3, page 11). The most science support funding (36 percent of total for that type) was directed to the Rogue River-Siskiyou National Forest; collaborative process funding went primarily to the Fremont-Winema National Forest (33 percent of total).

Distribution of technical assistance funds varied across national forests (see Figure 4, page 11). The Fremont-Winema NF received the most—25 percent of all funds—to develop a NEPA template to increase the pace of project planning in ponderosa pine forests for which the Lakeview Stewardship Group has a long-standing agreement for treatments. The Rogue River-Siskiyou National Forest received 22 percent of all funds, the majority of which were for science support (68 percent), to develop a large landscape strategy for restoration in the Rogue River Basin.

Figure 3 Technical assistance and science support funding by type, 2013–2015 (\$1,000s)**Figure 4 Technical assistance and science support funding by national forest, 2013–2015**

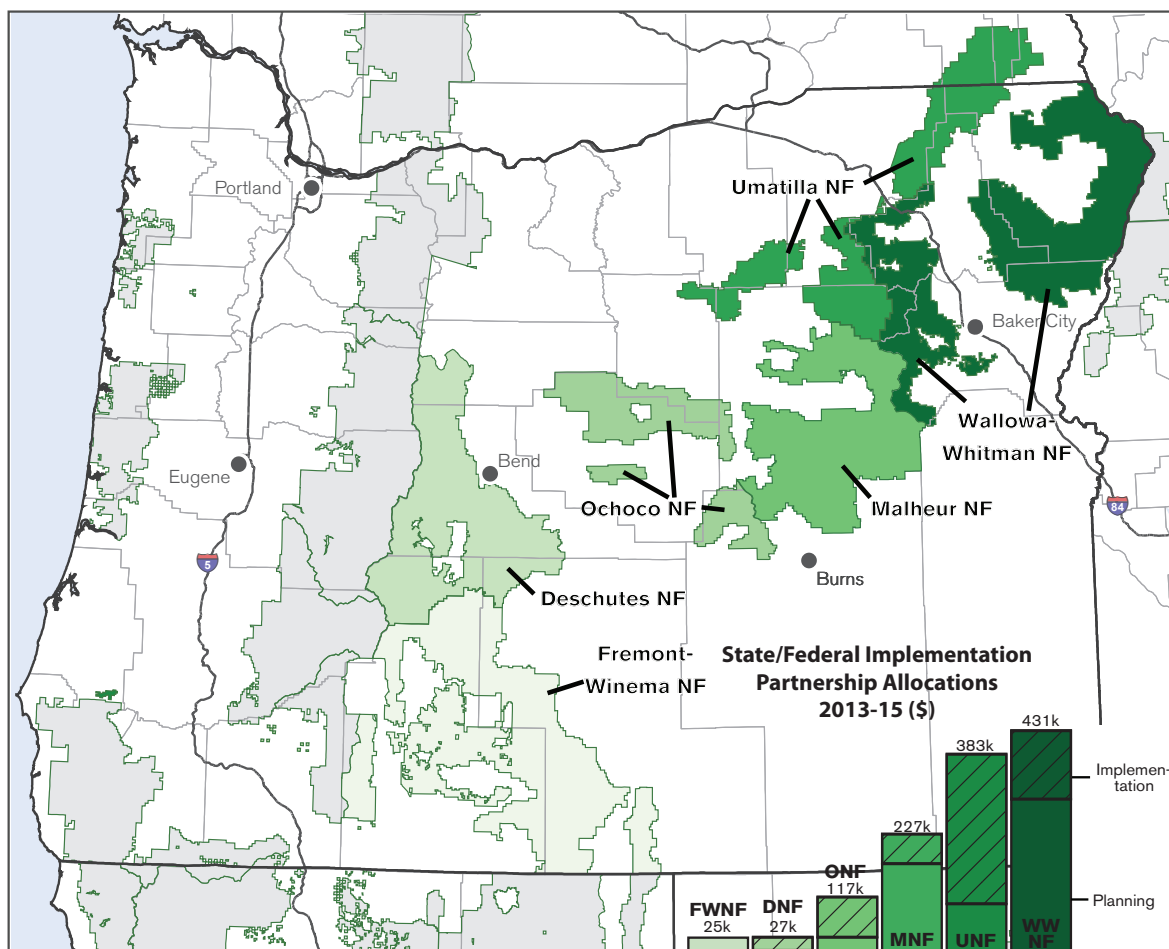
State/Federal Implementation Partnership

The funding package for the SFIP included a \$1.3 million investment aligned to leverage the USFS “Blue Mountains Restoration Strategy,” which includes work on the Wallowa-Whitman, Umatilla, Ochoco, and Malheur national forests. Ninety-six percent of SFIP funds were spent on activities on these four national forests (see Figure 5, below). The SFIP funds were divided equally between work on pre-sale activities and pre-NEPA data collection. The State’s SFIP funding was supported by an additional federal investment of \$10 million for forest restoration in the Blue Mountains.²

The State investment in pre-sale activities included work to identify unit boundaries, survey property boundaries, and mark timber. In total, ODF crews did layout on 2,300 acres of timber sales with a volume of 12.5 million board feet (mmbf). State investments in pre-NEPA data collection included the acquisition of LiDAR data, supporting stand exams on 277,000 acres of forestlands, and the completion of biological and cultural surveys for priority landscape-scale projects.

State investments in the SFIP supported 19 jobs and generated \$2.1 million in economic activity in eastern Oregon. The jobs supported include ODF

Figure 5 National forests receiving State/Federal Implementation Partnership support



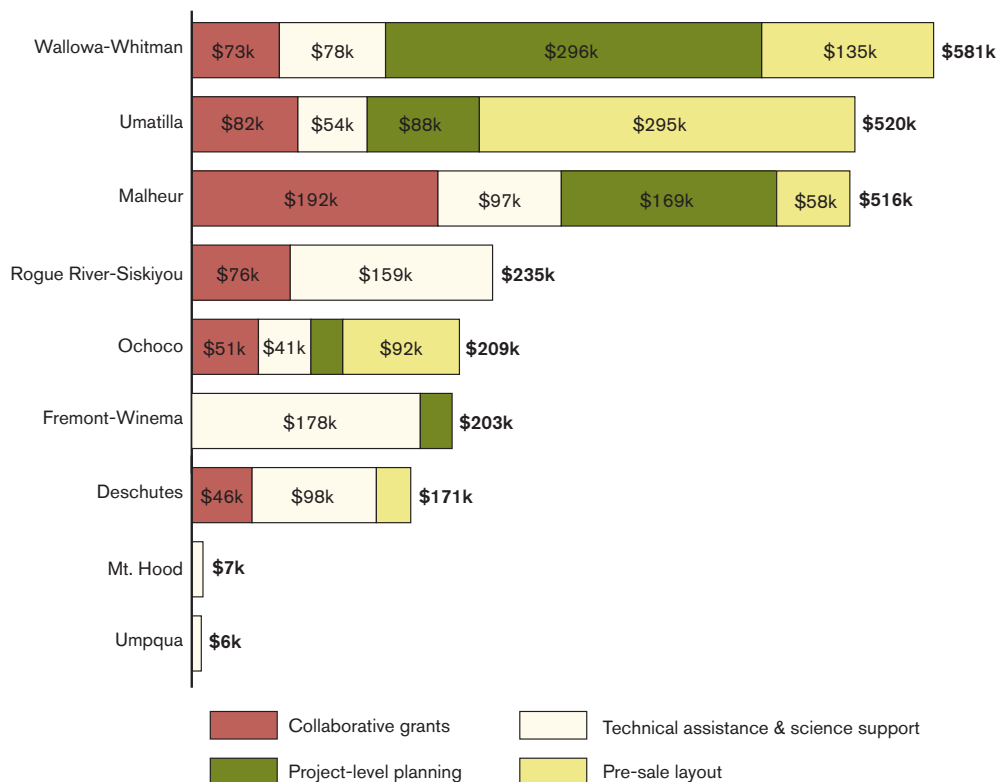
technicians hired to do work on USFS land, providers of services and supplies for SFIP activities, and employees in general-sector businesses (e.g., grocery stores, health care, entertainment) affected when those doing SFIP work spend their income.

Investments summary and crosswalk

To document where the three components of the FFH Program were invested, we “crosswalked” the CCG, TASS, and SFIP funding for each national forest. The average total investment per national forest

was \$276,557, and the median was \$209,109. The spatial pattern in investments is related mostly to the focus of SFIP on the Blue Mountains national forests. Forest restoration efforts in the four Blue Mountains national forests received \$1.8 million or 73 percent of the FFH Program funds (see Figure 6, below).

Figure 6 Oregon Department of Forestry Federal Forest Health Program funding by national forest, 2013–2015



Performance measures and indicators

Selected performance measures

The FFH Program performance measures are organized in six themes (see Table 2, below). Each theme has one or more performance measures and multiple indicators. Personnel at EWP and OSU worked with ODF's project manager to identify indicators that corresponded to the performance measures identified by the FFWG and could be reasonably tracked given available time and resources. The final set of indicators selected for this analysis is consistent with those commonly selected for social and

economic monitoring of multi-stakeholder collaborative efforts³ and those used in other accelerated restoration monitoring efforts in eastern Oregon.^{4,5}

We assessed the final indicators using a variety of data sources and methods (see Table 3, page 15). Sources included several USFS databases: the Forest Activity Tracking System (FACTS), Timber Information Management System (TIMS), the Projects, Appeals, and Litigation System (PALS), and the Federal Procurement Data System (FPDS). We used the economic model IMPLAN to evaluate

Table 2 Federal Forest Working Group (FFWG) performance measures and final indicators

Themes	FFWG performance measures	Final indicators
A. Treatment activities	Increase in NEPA-ready acres on dry side national forests	Change in acres of restoration activity
	Increased number of acres and watershed health projects contracted annually	Change in the number of watershed health projects
B. Timber supply	Increased overall timber supply, reported by diameter distributions or categories of wood products, volume sold, volume under contract, and volume in "project pipeline"	Change in volume sold by diameter distributions/product types
		Change in volume under contract
C. Economic impact	Jobs retained and created, including details on types of job and wages	Jobs created/retained in ▪ Mills and processing facilities ▪ Timber harvesting ▪ Restoration activities
D. Collaborative capacity	Increased size, diversity, or complexity of collaboratively developed projects	Dollars leveraged by Collaborative Capacity Grant projects
		Timber sales and service contracts linked to decisions made with collaboratives
		Changes in spatial scale of collaborative projects
	Increased diversity in collaborative participation and support	Changes in timelines of collaborative projects
		Changes in complexity of collaborative projects
E. NEPA	Reduction in appeals/litigation related to collaboratively developed projects	Levels of trust
F. Administrative efficiency	An agreement between the State and USDA Forest Service, increasing the pace and scale of collaboratively developed forest management on Oregon's dry-side national forests	Change in rate of objections and appeals
	Reductions in planning and implementation costs through efficiency gains	Change in planning costs per unit activity
		Changes in implementation costs per unit activity

economic impacts of timber sales and service contracting. We conducted focus groups with the USFS and collaborative partners to understand the effects of the investments on the capacity of collaborative groups and administrative processes, and analyzed available grant documents.

Theme A: Treatment activities

The FFH Program performance measures for treatment were changes in the acres treated for forest restoration and watershed health. Forest restoration treatments include activities that reduce tree density and forest fuels, such as commercial sales, pre-commercial thinning, broadcast burning, and pile burning. Watershed health treatments include other activities that improve the conditions of watersheds, such as riparian fencing, culvert replacement, road work, and in-stream fish habitat improvement.

The acreages of fuels treatment implemented in any given year on the Blue Mountains national forests have been highly variable (see Table 4, below). However, there are some patterns in the types of treatments. The number of acres included in commercial sales has increased roughly 25 percent between the baseline years (2009–2011) and the FFH Program years. At the same time, the number of acres of piling and broadcast burning has declined steadily. The acres of pre-commercial thinning dipped in the years after a period of high treatment in 2010 that was funded with investment from the American Recovery and Reinvestment Act (ARRA). Although those highest levels of treatments have not yet returned, treatment area in 2014 had rebounded to pre-ARRA levels. Patterns and magnitude of fuel treatment are highly variable across Blue Mountains national forests, with the Malheur National Forest accounting for the greatest area of treatment in many categories (see Appendix Table 10, page 35).

Table 3 Data sources and methods for each performance measure theme

Theme	Data sources
A. Treatment activities	USFS FACTS
B. Timber supply	USFS TIMS
C. Economic impact	USFS TIMS; economic modeling using IMPLAN; federal contracting data from FPDS
D. Collaborative capacity	Grant documents; focus groups with collaboratives and USFS
E. NEPA	USFS PALS
F. Administrative efficiency	ODF reports and communication with ODF staff

Table 4 Fuels treatments on Blue Mountains national forests, 2009–2014 (acres)

Fuels treatments	2009	2010	2011	2012	2013	2014
Broadcast burning	31,073	16,259	21,922	20,269	18,440	19,000
Commercial timber sale	18,436	14,192	13,970	14,033	19,465	24,954
Pile burning	11,178	17,399	13,520	18,617	16,361	18,496
Piling, machine or hand	16,071	28,974	11,179	10,370	19,949	8,104
Pre-commercial thinning	25,021	45,420	12,913	12,818	23,545	23,291
Salvage timber sale	8,253	1,175	2,382	75	564	123
Surface treatments	12,749	6,390	2,540	175	1,971	3,675

Watershed health treatments had more annual variation and fewer clear patterns, compared to fuels treatments (see Table 5, below). For instance, only eight acres of wildlife habitat treatments were recorded in 2013, but more than 2,700 acres of treatment were recorded in 2014. Range fencing was by far the most common treatment, but it also varied considerably from year to year. As a whole, forest and watershed treatments were completed on fewer acres than fuels treatments. This may be because there are fewer resources allocated for this work, forest and watershed treatments are typically completed on focused areas that do not cover as much acreage, fewer treatments are being completed, or because reporting on these treatments within USFS databases is inconsistent. Other databases not available for this work may provide greater insight into the extent of watershed health treatments completed within Blue Mountains national forests. Results presented here highlight the need to develop better sources and accountability of data entry if these metrics are to be used to describe landscape outcomes from restoration.

Theme B: Timber supply

The amount of timber sold and under contract are indicators of USFS timber availability and were selected as the primary FFH Program performance measures for timber supply. The annual volume of

timber sold from Blue Mountains national forests in the period 2012–2014 is 12.5 percent greater than during the 2009–2011 period (see Figure 7, page 17). The volume of timber sold in FFH Program years (2012–2014) averaged about 112 mmbf per year. The majority of that timber volume was advertised as sawtimber. The percentage of timber sale volume that was sawtimber increased during the period, with sawtimber volumes 58 percent higher in the FFH Program period compared to the baseline years.

For the most part, the increase in the volume of timber sold during the program years from the Blue Mountains national forests traces to large increases in volume sold from the Malheur National Forest to fulfill the USFS's commitment to the 10-year stewardship contract (see Table 6, page 17).⁶ Other Blue Mountains national forests, such as the Umatilla National Forest, saw a decrease or little change in the volume of timber sold during the period. However, the shares of timber sale volumes that were sawtimber were greater in the FFH Program years compared to the baseline years for all four national forests.

A timber purchaser has several years after purchasing a USFS timber sale to harvest the timber. The amount of volume that has been sold but not yet harvested is “volume of timber under contract.” The

Table 5 Watershed health treatments on Blue Mountains national forests, 2009–2014 (acres)

Forest and watershed treatments	2009	2010	2011	2012	2013	2014
Animal damage control	78	44	791	324	996	171
Inland fish habitat inventory and improvement	134	5	168	-	-	-
Insect and disease surveys and control	53	-	20	25	5	49
Invasive treatments	12,358	16,121	12,400	11,157	10,251	13,755
Range fence removal	-	2,000	-	-	-	-
Range fencing	65,391	103,401	61,317	74,824	41,619	16,695
Tree encroachment control	186	2,443	178	367	-	-
Tree planting	8,827	8,537	8,135	5,879	6,383	6,776
Wildlife habitat treatments	1,213	1,299	139	108	8	2,703

Figure 7 Volume of timber sold during baseline (2009–2011) and program years (2012–2014) from Blue Mountains national forests

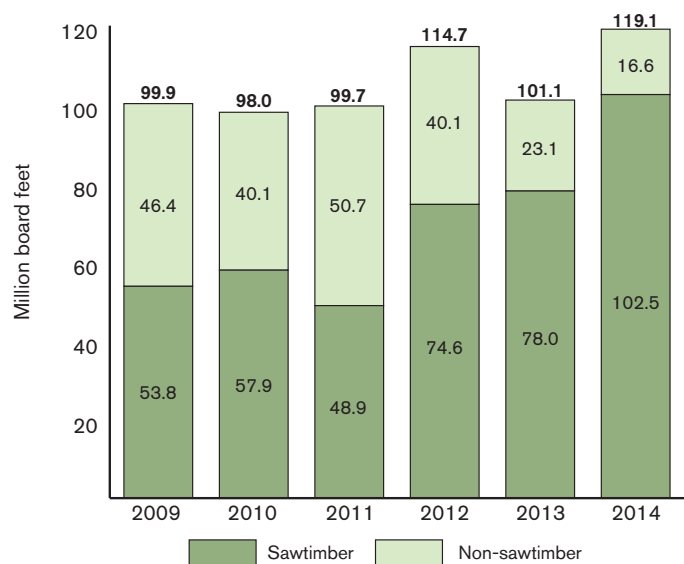


Table 6 Volume of sawtimber and non-sawtimber sold from Blue Mountains national forests (in million board feet)

National Forest	2009	2010	2011	2012	2013	2014	Total
Malheur							
Sawtimber	20.6	30.4	25.7	32.6	31.5	60.3	201.0
Non-sawtimber	11.4	13.0	10.2	16.0	10.1	5.3	66.1
Total	32.0	43.3	35.9	48.5	41.6	65.6	267.1
Ochoco							
Sawtimber	9.5	5.6	12.1	11.3	12.0	11.3	61.8
Non-sawtimber	0.8	0.9	1.0	1.3	1.3	1.8	7.1
Total	10.2	6.5	13.1	12.7	13.3	13.1	68.9
Umatilla							
Sawtimber	13.6	7.9	4.4	19.3	7.6	21.7	74.5
Non-sawtimber	32.3	19.9	34.1	20.6	5.0	7.5	119.4
Total	45.8	27.9	38.5	39.9	12.6	29.2	193.9
Wallowa-Whitman							
Sawtimber	10.1	14.0	6.7	11.4	26.9	9.2	78.3
Non-sawtimber	1.9	6.3	5.4	2.2	6.7	2.0	24.5
Total	12.0	20.3	12.1	13.6	33.6	11.2	102.8
Blues Region Total							
Sawtimber	53.8	57.9	48.9	74.6	78.0	102.5	415.6
Non-sawtimber	46.4	40.1	50.7	40.1	23.1	16.6	217.1
Total	99.9	98.0	99.7	114.7	101.1	119.1	632.7

amount of volume under contract provides some insight into the potential total volume from USFS land that could enter the wood products market at the present time. Over the baseline years, USFS volume under contract ranged from a low of 138.5 mmbf in 2009 to a high of 154.9 mmbf in 2011. During the FFH Program years, the volumes ranged from a low of 148.5 mmbf in 2012 to a high of 264.6 mmbf in 2014 (see Figure 8, below). The USFS volume under contract in 2014 in the Blue Mountains was the greatest volume under contract in that region since year 2000. This suggests that timber purchasers are acquiring contracts and waiting for markets, or other conditions, to improve prior to harvesting. It is anticipated that harvests of volume under contract will increase in the coming years and be evident in harvest reports compiled by ODF.

Theme C: Economic impact

We assessed the economic impacts of accelerated restoration by estimating the employment and economic activity resulting from USFS restoration

projects (timber sales and service contracts) on the Blue Mountains national forests between 2009 and 2014. We developed a consistent framework for conceptualizing and accounting for the economic effects of restoration projects (see Figure 9, page 19). We consulted with both ODF and USFS economists in developing our approach to be consistent with other economic reporting by both agencies.

Restoration projects likely include a portion of activities managed through timber sales and a portion of activities managed through service contracts. The former is typically administered as a timber sale of commercial products; the latter as a service contract for work that does not generate commercial products, such as pre-commercial thinning, piling, tree planting, or weed spraying. Both of those components of restoration projects create direct economic activity as businesses and workers implement projects “in the woods.” The harvesting of commercial timber creates additional direct economic activity as commercial wood is processed in mills and other facilities. All of those direct activi-

Figure 8 Volume of timber under contract with timber purchases from the Blue Mountains national forests

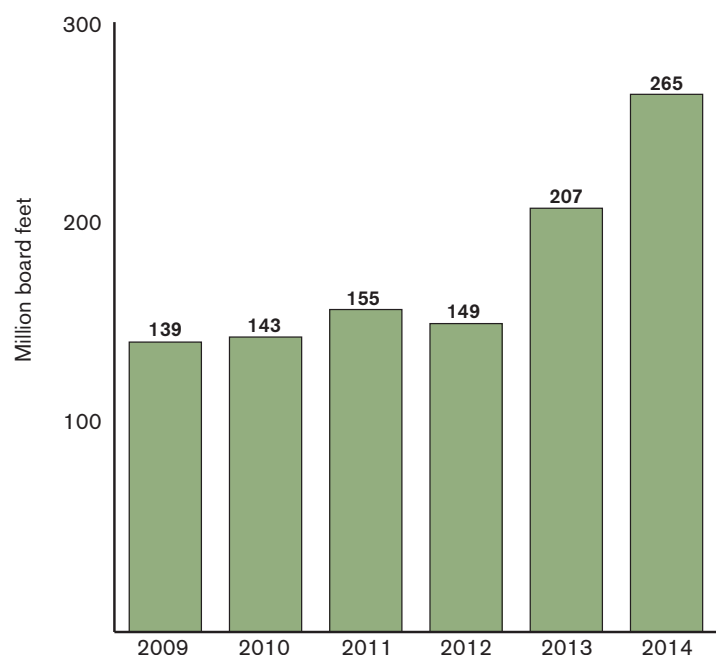
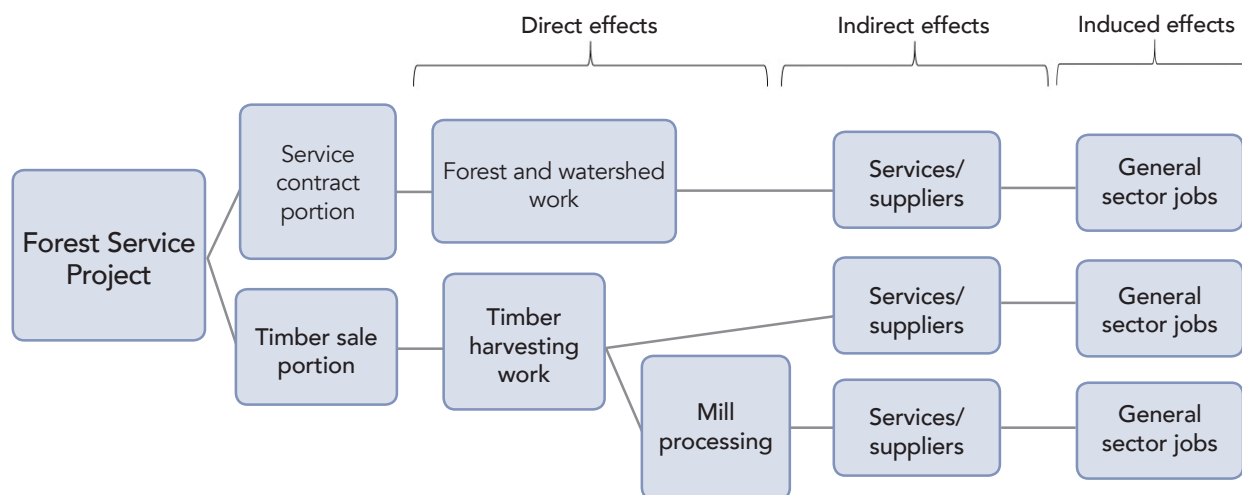


Figure 9 Schematic diagram showing how restoration projects contribute to economic activity through direct, indirect, and induced effects



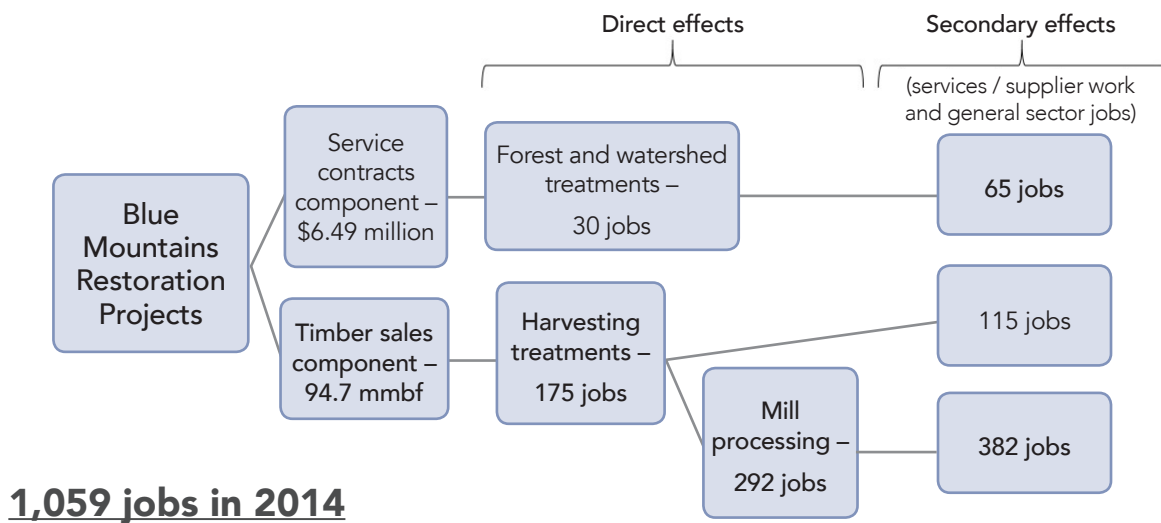
ties also require services and supplies (such as fuel, chainsaw sharpening, hand tools, financial services) purchased from other businesses. The economic activity associated with services and suppliers is referred to as indirect effects. Finally, everyone employed through direct and indirect effects spends money in the economy on groceries, health care, lodging, and entertainment, which creates induced economic effects. In subsequent reporting, we combine the indirect and induced employment effects into “secondary effects.”

In 2014, restoration projects in the Blue Mountains national forests supported 1,059 jobs in eastern Oregon (see Figure 10, page 20).⁷ Those jobs are reported as one full year’s worth of work; a greater number of jobs may be filled for periods lasting less than one year. Jobs may also be full or part time. Employment levels in 2014 continue an increasing trend of eastern Oregon employment during the FFH Program years. Between 2012 and 2014, restoration projects on the Blue Mountains national forests have supported about 974 jobs in eastern Oregon (see Figure 11, page 20). Average annual employment during the FFH Program years has been about 16 percent higher than employment from restoration during the baseline years.

Employees doing different restoration jobs, working for companies that supply businesses doing restoration work, and employed in general sectors that sell to restoration project workers all have differing average annual pay. Those who work in harvesting activities in support of restoration have average annual compensation of about \$43,600 if they work for a full year. Those working in mills processing woody material from restoration have annual incomes of about \$52,000 if working in sawmills or plywood mills and about \$35,400 if working in other types of wood processing facilities, when employed for a full year. Those doing forest and watershed treatment work have annual income of between about \$31,000 and \$36,000 depending on the type of work, with labor-intensive work generally paying less than equipment-intensive work. Both of those pay figures may be much lower if work is intermittent or seasonal. General sector jobs include a large share of retail and service-sector jobs. Average annual income for those types of jobs is typically in the \$20,000 to \$30,000 range.⁸

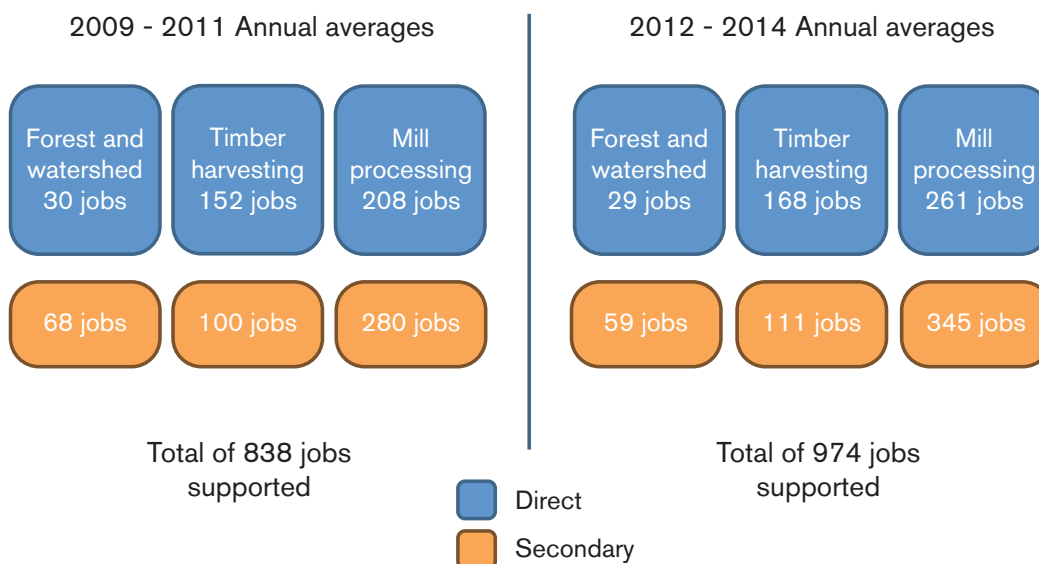
Business sales result from restoration projects as businesses enter into contracts with the USFS to do restoration treatments and sell timber and wood products produced from restoration. Sales also re-

Figure 10 **Employment throughout eastern Oregon from restoration projects on the Blue Mountains national forests, 2014**



(Jobs are reported as a year's worth of employment and are limited to businesses located in eastern Oregon)

Figure 11 **Average annual jobs supported in eastern Oregon from restoration activities in Blue Mountains national forests during the baseline and program years**



sult as businesses sell supplies and services to each other to support restoration work, and as employees buy goods and services from places like grocery stores, banks, and restaurants. Across eastern Oregon, annual business sales increased 38.3 percent from an average of \$129.6 million during the baseline years to an average of \$179.3 million during the FFH Program years (see Figure 12, below).

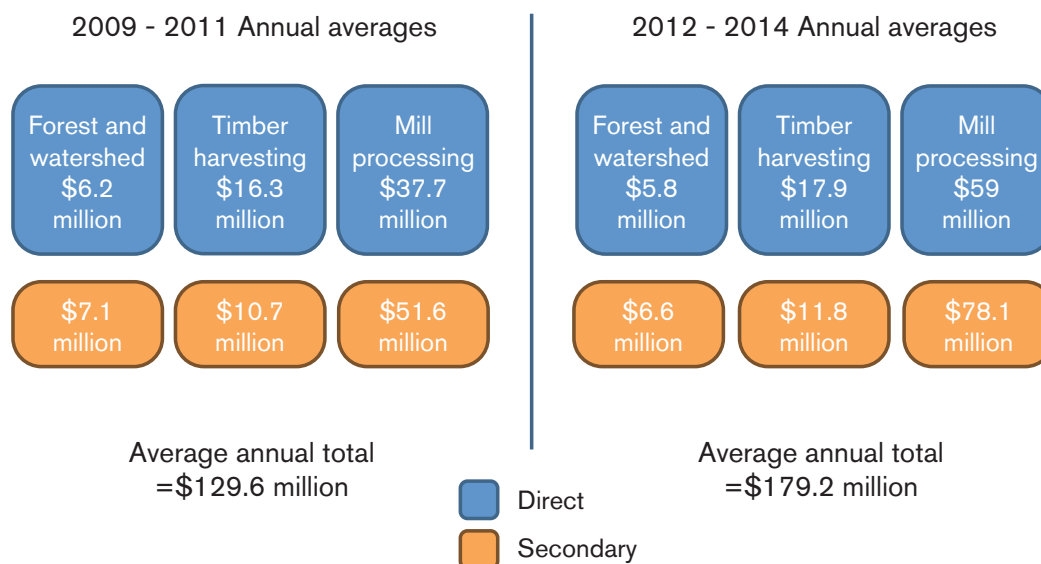
Theme D: Collaborative capacity

Forest collaborative groups have defined missions focused on multiple projects or on the overall direction of specific landscape with which they are affiliated. They typically meet regularly (once a month or more frequently). In general, collaboratives “provide review and recommendations for federal forest management activities occurring near their communities” that can balance ecological sustainability, economic viability, and social acceptability.⁹ Within that general characterization, the specific focus, activities, and outcomes of collaboratives varies greatly across Oregon.

It is important to note that with a few exceptions, forest collaboratives do not directly implement work on the ground themselves. Rather, their goal is to aid the USFS in implementing projects by working on collaboration in support of the NEPA-required planning process. When collaboratives are beginning, it is typical for them to primarily work on overcoming conflict, building trust, and establishing structures and processes. As groups mature, they may focus on developing collective input on one or more planning areas, or developing broader agreements that cover specific forest types or conditions across the landscape.

Collaboratives vary in the degree to which they formalize their agreements through voting, written documents, or verbal reporting to the USFS. They may also make recommendations about how projects are implemented, such as through stewardship contracts, partners agreements, etc. Once projects are implemented, collaboratives will often monitor to assess any observable effects and how their input was used. Learning from the outcomes of management actions that result from their agreements is

Figure 12 Average annual business sales in eastern Oregon from restoration activities in Blue Mountains national forests during the baseline and program years





intended to help them apply adaptive management and previous knowledge to future planning areas or other projects. Importantly, collaboratives do not collaborate on or directly affect every single USFS planning area on their affiliate forest, but rather typically focus only on one or two specific planning areas at a time and tend to focus on specific kinds of activities and interests.

As of 2015, 25 collaboratives cover all 11 national forests in Oregon. For this report, we focus on the five collaborative groups active on the Blue Mountains national forests to parallel the geographic focus of the other FFH Program performance measures in this report. The five collaboratives in the Blue Mountains region are similar in that they typically focus on 1) engagement during the NEPA process, 2) monitoring, and 3) an entire national forest (with the exception of the Malheur National Forest, which has two groups).

Baseline context (2009-2011)

In 2009–2011, collaborative groups were not yet a widespread phenomenon. Only two of the current five collaborative groups were active on the Blue Mountains national forests: BMFP and Harney County Restoration Collaborative (HCRC) (both on the Malheur National Forest and established in 2006 and 2008, respectively). In the 2009–2011 time

period, the Wallowa County Natural Resources Advisory Committee (NRAC) was active on federal forest issues, and was focused specifically on pre-NEPA watershed analyses and other natural resource issues within Wallowa County. The Umatilla and Ochoco national forests did not have dedicated collaboratives.

Before, and for a portion of the baseline period, BMFP and HCRC were primarily focused on building relationships, trust, and agreement through collaboration on less ecologically/socially complex issues and land-use designations (e.g., dry ponderosa pine in matrix forest areas). This is typical for the first few years of a collaborative's life. The USFS issued Records of Decision for Dad's Creek (2008; 7,800 acres) and Damon (2010; 19,000 acres) projects on which the BMFP collaborated.¹⁰ The USFS issued a Record of Decision on HCRC's first project (Jane; 32,265 acres) in 2010.¹¹ Facilitation and staffing of these groups was inconsistent and often provided by external entities, which was critical to reach agreement on these initial projects. Current sources of collaborative capacity funding (such as the FFH Program and the National Forest Foundation's Community Capacity and Land Stewardship Program) did not exist during the formative days of BMFP and HCRC.

FFH Program context (2012–2014)

In 2012, new collaborative groups emerged on the Wallowa-Whitman (Wallowa-Whitman Forest Collaborative–WWFC), Umatilla (Umatilla Forest Collaborative Group–UFCG), and Ochoco (Ochoco Forest Restoration Collaborative–OFRC) national forests. Each of these groups focused in their first year on gauging interest and building participation, developing charters and ground rules, and identifying their first projects. In 2013–2014, the groups began substantive engagement with planning for actual projects.

In 2011, BMFP and HCRC combined forces to submit an application under the USFS Collaborative Forest Landscape Restoration (CFLR) Program. Their project—the Southern Blues Restoration Coalition—was selected for 10-year funding in 2012. Designation as a CFLR project dramatically increased the ability to implement restoration work on the landscape covered by BMFP and HCRC. Also during this time, BMFP and HCRC continued to expand their work on more planning areas and supported the development of a 10-year stewardship contract on the Malheur National Forest.

In total, Records of Decision were signed on 137,487 acres of collaborative projects in the Blue Mountains national forests. In addition, the five collaborative groups continue their work to build consensus for active management on restoration projects for which the total planning acres equate to 465,356 acres (see Table 7, below; also see Appendix Table 11, page 36 for details on specific collaborative projects).

During the FFH Program (2012–2014), the National Forest Foundation's Community Capacity and Land Stewardship grant program began in 2012, and the FFH Program's CCG awards began in 2013. This allowed many collaboratives to hire a facilitator or coordinator for the first time and technical assistance was still primarily provided by external entities. The FFH Program expanded both the capacity of local organizations and staff to facilitate from within the collaborative group using the CCG awards and broadened the team of technical assistance providers available to these collaboratives through TASS.

Collaborative use of the OWEB Collaborative Capacity Grants

All five collaborative groups in the Blue Mountains were awarded CCG funding from OWEB between 2013 and 2015. Each is pursuing accelerated restoration using a variety of approaches (see Table 8, page 24). We found that collaboratives and their partners leveraged an additional \$787,514 in funds and in-kind resources, nearly tripling OWEB's original investment. This demonstrates the value of collaboratives in helping attract resources for restoration from diverse partners.

Few collaborative groups are organized as 501c3 or nonprofit status and thus rely on other organizations to provide fiscal administration and often other services. Of the \$395,824 awarded in grant funds to the five collaboratives in the Blue Mountains, nearly 50 percent were expended on contracted services (see Figure 13, page 25). This is typically the services of a facilitator or other support contracted

Table 7 Acres planned and decisions signed for Blue Mountains forest collaborative group projects, 2012–2014

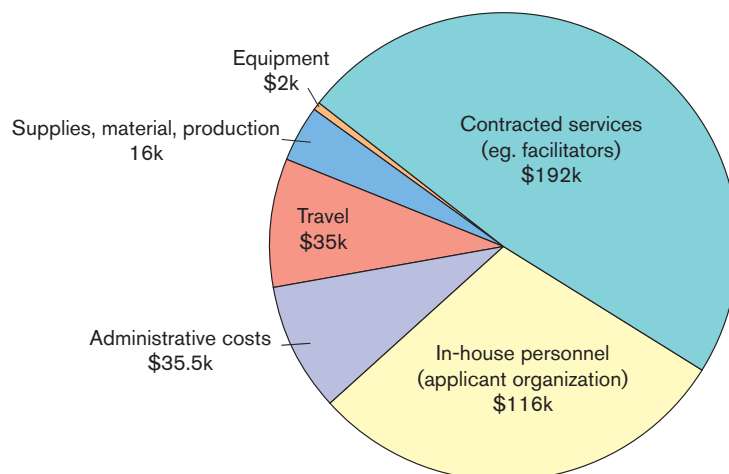
Collaborative	Acres in planning, 2012–2014	Acres for which a decision was signed, 2012–2014
Wallowa-Whitman Forest Collaborative	147,621	N/A
Umatilla Forest Collaborative Group	48,621	N/A
Blue Mountains Forest Partners	125,000	39,000
Harney County Restoration Collaborative	119,608	98,487
Ochoco Forest Restoration Collaborative	24,506	24,506
Total for Blue Mountains by end of 2014	465,356	137,487

Table 8 OWEB capacity grants to Blue Mountains forest collaborative groups

Source: Grant proposals and agreements, OGMS

Collaborative	OWEB grant(s) amount	Match leverage	Activities funded
Blue Mountains Forest Partners	\$123,620 (two grants)	\$160,755	▪ Reinvent collaborative process to keep up with increased pace and scale ▪ Facilitate dialogue with scientists ▪ Strengthen information exchange with other collaboratives ▪ Develop adaptive management framework ▪ Increase outreach and communications ▪ Hire monitoring liaison ▪ Increase staff capacity for research and program support
Harney County Restoration Collaborative	\$65,586 (two grants)	\$30,235	▪ Fund mileage to support member participation ▪ Create monitoring coordinator position ▪ Sponsor two forums on economic development, and plan local economic development projects ▪ Collaborate on the Wolf and Dove projects ▪ Monitor the Upper Pine and Marshall-Devine projects
Ochoco Forest Restoration Collaborative	\$ 51,246	\$30,400	▪ Increase collaborative agreement about forest types and acres to restore; and apply to two new planning areas ▪ Undertake community outreach ▪ Initiate multiparty monitoring on Wolf project
Umatilla Forest Collaborative Group	\$82,125	\$226,462	▪ Expand zones of agreement through work on Kahler and Thomas Creek projects ▪ Conduct experimental learning design on Thomas Creek, including youth data collection ▪ Focus on cultural resources with the Umatilla Tribes ▪ Provide mileage member participation ▪ Participate in shared regional learning ▪ Conduct local community outreach
Wallowa-Whitman Forest Collaborative	\$73,208	\$77,338	▪ Support implementation of Lower Joseph Creek project ▪ Undertake assessment work for East Face project ▪ Support collaborative field tours, meetings, data collection, and communication
Total for Blue Mountains	\$395, 824	\$787,514	

Figure 13 Cost categories of OWEB Collaborative Capacity Grant Program in the Blue Mountains, 2013–2015



out by the collaborative's fiscal sponsor, and reflects the importance of this function for increasing quality and pace and scale. Twenty-nine percent of funds were used for in-house personnel work on the project by the fiscal sponsor. In addition to receiving funds, fiscal sponsors also contributed a significant proportion of the reported \$787,514 total in match. The remaining 23 percent of grant funds were for travel, supplies, equipment, and grant administration costs.

Collaborative Capacity Grant performance metrics for collaborative groups were designed at a place-based level for individual collaboratives and not intended to standardize the size of restoration projects across different collaborative groups. Collaboratives are unique in their organizational status and maturity, and the nature of their work. Collaboratives were allowed flexibility to develop additional metrics and methodology for measurement to include in their OWEB grant reports. As recommended by the FFWG, OWEB asked collaboratives to report on the following outcomes at minimum:

- Increased complexity/diversity of collaborative projects as compared to a preproposal baseline. *Note: this metric is applied at a place-based level for individual collaboratives and not intended to standardize the size of restoration projects across different collaborative groups.*

- Increased ability to reach agreement/develop “zones of agreement.”
- Increased pace and streamlined consensus building, including any process innovations.

Complete and consistent quantitative reporting of measures is not feasible given this reporting approach. Grant reports were due after this report was completed, so it was not possible to completely analyze the specific outcomes of their work without this documentation. Additional outcomes will be included in future reports.

To increase standardization to measure impact, we assessed collaborative activities to date using grant documents and focus groups. Therefore, we provide a qualitative assessment of their progress toward these and other dimensions that we identified as important using focus groups for self-evaluation that we conducted with each group in winter 2014–2015 (see Appendix Table 12 on page 37). We designed the focus groups with four indicators to capture aspects of accelerated restoration (timelines, spatial areas, and complexity) and levels of trust, which are integral to achieving and increasing agreement. We held focus groups in person with the operations-or-equivalent committee in each of the five collaboratives, with at least one USFS staff person present to provide perspective on typical planning area sizes and timelines for that national

forest. Groups were tasked with agreeing on a group score for each indicator (see Appendix Table 13 on page 38). For the three collaboratives that originated in 2012 and have yet to complete a project, comparison against their past baseline was not possible, but we discussed any changes in their national forest's approaches to projects since the start of the collaborative in each case. Many participants in each group found it difficult to clearly "score" their current status on these indicators, expressing concern that attempting to quantify collaborative progress without adequate context could misrepresent their work. The results of these focus group discussions are woven into the following sections.

Linking collaborative activities to outcomes on the ground

Linking collaboratives to specific outcomes on the ground is somewhat challenging because of the manner in which the USFS reports on timber sales and service contracts. We also suggest that only looking at only the timber sales/service contracts associated with the projects on which they collaborated is not a full picture of impact, as collaborative groups are indirectly influencing activities on national forests in other ways; and because their impact has value beyond these activities. However, we did obtain data on the timber sales and contracts associated with NEPA decisions made with collaborative participation since 2010 to shed partial light on this picture. Five decisions related to collaboratives have been signed on the Malheur National Forest during the FFH Program (one on the Ochoco was signed later in 2014; timber sales and contracts have yet to be awarded). Because three of the five collaboratives are new, projects on which they have worked have yet to reach on-the-ground implementation, or are just about to be implemented. All of the following numbers pertain only to the Malheur National Forest/BMFP/HCRC. A reassessment of collaborative impacts within a year would likely show a more complete accounting of collaborative outcomes on all four national forests.

Many service contracts for restoration work were also performed within these same five collaborative planning areas on the Malheur National Forest (see Figure 14, page 27). Because many treatments occur

in sequence on a given acre (e.g., both commercial and pre-commercial thinning) acres should not be summed across categories. Commercial thinning was the most extensive activity in these areas, totaling more than 35,000 acres.

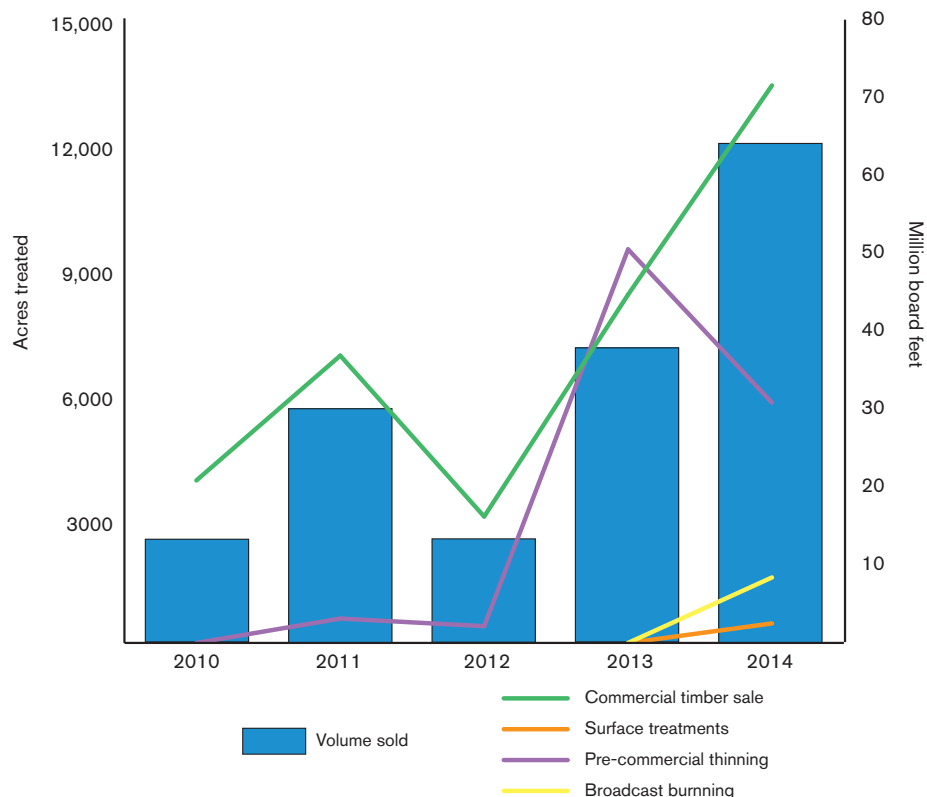
Advertised timber sale volumes within the five NEPA project areas where there was BMFP and HCRC involvement in 2010–2014 totaled 156.8 mmbf (see Figure 14, page 27) and includes both sawtimber and non-sawtimber. All but one collaborative planned project had a purchaser from the local area (Grant County). A large timber sale in 2011 associated with the Damon planning area was purchased by a mill in a neighboring county.

Changes in spatial area of group's work

Spatial scale of collaborative work is important to assess because there is interest in meeting restoration and wildfire risk reduction goals over landscape areas. There was no region-wide trend in spatial scales. For some groups/national forests, planning areas are larger than typical, while others are typical in size; and this could depend on the project. The WWFC is working on the largest planning area (100,000 acres) with the Blue Mountains ID team. All groups also indicated that smaller planning areas may be appropriate when a group is new, lacks trust, and/or is addressing a complex issue or issues. The UFCG, for example, is focusing on both a larger dry forest project and a smaller moist mixed-conifer project; and the BMFP has historically "worked its way up" from smaller to larger projects. It should be noted that the WWFC's large project is the collaborative groups first project and provides a case study in a young collaboratives ability to start "at scale."

Increased project scale can be attributed to collaboratives in some ways. For example, sustained collaboration through BMFP and HCRC has encouraged the Malheur National Forest to identify larger planning areas where possible. The Blue Mountains ID team chose the Lower Joseph Creek project in part because of the history of collaboration with the Wallowa County NRAC. Demonstration of existing collaborative agreement on approaches for forest types that cross large areas (e.g., in a "zone

Figure 14 Treatment acres and sold timber volume associated with collaborative-planned project areas, Malheur National Forest



of agreement” type of document) can help give the USFS confidence in planning at larger scales, and identifying where to plan. Ability of collaboratives and the USFS to access and use new tools and datasets for planning on large landscapes (e.g., use of LiDAR or modeling) can also ensure that quality analysis is possible even as areas expand.

Spatial size of planning areas would be best considered in light of other indicators and context, rather than as a standalone measure of success. In particular, collaborative participants suggested that measuring any increases in treatment acres within planning areas over time would be a useful future indicator of increased pace and scale. Participants also noted that other mechanisms for implementation, such as the CFLR Program or a large stewardship contract, can increase the spatial footprint of a collaborative.

Changes in pace and streamlined consensus building

Increasing the pace of project area planning, and therefore decreasing administrative costs, is a central goal of the FFH Program. Collaboratives do affect pace of planning and implementation. For example, the development of zones of agreement and the dedicated time that BMFP’s Executive Director could spend organizing that collaborative with support from the FFH Program allowed the group to take on more projects, and coordinate more efficiently and consistently with USFS. Groups that have transitioned through several facilitators/coordinators, particularly if those are part-time, rather than having consistent leadership, have been more challenged to achieve increased pace. Groups that are undertaking new issues or tend to rely heavily on information from the USFS ID team or scientists may also be progressing rather slowly, unless they have systems for actively helping with that infor-

mation gathering, rapidly learning and using the information, and building the trust necessary to come to agreement.

The rate of pace varies between the collaboratives, and appears to be somewhat dependent on change in leadership and consistency of participation. For example, the UFCG experienced significant turnover in the entire Forest Service planning team for its Kahler project and to a lesser extent, turnover on the Thomas Creek team, which in part slowed its work. At the same time, the UFCG changed its facilitator midway through the project and has had significant changes to the makeup of collaborative participation. Without continuity, maintaining momentum can be challenging.

It is important to note that accelerating pace can also have tradeoffs. Given that three of the five collaboratives are new, expectations from external sources regarding rapid project timelines need to be adjusted for capacity and allow time for trust levels to increase. Even more longstanding groups can suffer from misunderstanding or confusion about if and how agreement was reached when processes are rapid, which may result in revisiting and debating those agreements.

Focus groups also suggested that timelines should be segmented for future monitoring, differentiating between pre-NEPA, planning, and implementation. For example, the HCRC focus group described how the 10-year Malheur Stewardship Contract helped speed up implementation significantly, and was already resulting in visible impacts to local jobs and businesses. An example tradeoff is that a longer time spent on one planning area might result in broad agreement about a forest type that could be easily applied in future areas.

Changes in complexity of projects

All five collaborative groups reported that they are having dialogue about several issues that they defined as complex for both their social and ecological values, but not all groups felt they were coming to agreement yet on these issues. These include active management in inventoried roadless areas and riparian areas, management needs

for moist, mixed-conifer forests; and relationships between roads and wildlife, and roads and water. A few groups have discussed salvage logging after fires on their forests (e.g., the BMFP and OFRC) although they have not pursued any agreement on this issue. Some newer groups (WWFC and UFCG) suggested that they could not yet report full agreement on complex issues because their processes or trust levels had not yet reached those points. Complexity also may manifest as the interest in working across larger landscapes and forests on shared themes such as aspen, or on the upcoming forest resiliency project proposed by the Blue Mountains ID team.

The newer collaboratives began by working on topics with higher degrees of complexity than older groups, who built agreement in the past on smaller planning areas and on forest types for which there is scientific consensus about restoration needs. This may pose challenges to these newer groups, particularly if requests for science and information are extensive, and there is hesitancy to act in the face of uncertainty. Complexity can increase the time of a project, and challenge trust. But it can also create an opportunity for stakeholders to take risks and experiment.

Level of trust

Both researchers and practitioners consistently identify trust as a key factor in success in natural resource collaboration. It is seen as a quality that needs to be built in a group's formation, and maintained so that stakeholders are willing to take risks or support something with which they are not entirely comfortable (i.e., work at larger scales, on quicker timelines, or on more complex issues).

All groups strongly suggested that trust was a fundamental necessity for their collaborative to be able to work at pace and scale. Perceptions of trust levels, however, varied between collaboratives. The two groups that scored themselves at lower or medium trust (WWFC, UFCG) are also newer and have yet to develop agreement on their projects, which also have complex dynamics such as cool, moist-mixed conifer forest or large landscape scale planning. Completion of projects could help increase

trust in these groups in the future if stakeholders feel respected and satisfied with the outcome and with making progress. Several participants from different groups described having “fundamental trust” in others, even if they did not always agree with them, or even if a particularly controversial topic such as salvage logging arose and there was intense discussion. Some indicated a lack of trust in stakeholders who would come to collaborative meetings occasionally but who did not share in agreements, and suggested that these stakeholders likely did not trust the collaborative either.

Both within collaboratives and with the USFS, relationships appeared instrumental to trust. Transitions in one participating group's collaborative representative have required new relationship building with that organization in all five Blue Mountains collaboratives. The arrival of new USFS staff and leadership on the Malheur and Wallowa-Whitman national forests has also challenged collaboratives on those forests to learn about, and work with, new approaches. Overall, participants did not indicate a lack of trust in the USFS as an institution, but did suggest that trust could change depending on the people working on each national forest.

Summary

In sum, there is not yet adequate evidence of all outcomes that Blue Mountains forest collaboratives have likely had as a result of the FFH Program. We know that collaboratives and their supporting organizations are leveraging significant resources. Three of the five groups are relatively new and national forests are just reaching decisions on their first projects at this point in time, and grant activities will deliver results beyond the timeframe examined in this report. Also, as the Blue Mountains collaboratives primarily work on planning, expectations of their “on-the-ground” outcomes should recognize the timelines of implementation that are not controlled by collaborative groups. We suggest that these collaboratives are undertaking work on a range of complex issues with high hopes and pressures, and that they will need to focus on securing durable facilitation that also provides coordinating functions outside of meetings, using processes that will build and capture agreement, and particularly on nurturing and (re)building trust, which is a key factor in their ability to achieve accelerated restoration. Achievement of agreement or other recognized outcomes, sooner than later, will also be essential to shoring up stakeholder commitment and belief in collaboration as an approach that can yield results.



Theme E: NEPA

Under the National Environmental Policy Act (NEPA), members of the public have an opportunity to file administrative objections and administrative appeals to planned projects. Individual citizens, businesses, and groups with varying perspectives, and oftentimes on opposite sides of an issue, can file objections or appeals. There is a general perception that growing numbers of forest collaboratives operating within eastern Oregon and the broadening geographic scope of collaboration will lead to lower rates of objections and appeals to USFS project planning.

Objections and appeals are different from litigation of a USFS project that is handled via the court system. Objections and appeals are common (a group must file an “objection” to have standing in any future litigation) and handled by USFS through defined administrative processes. The majority of projects that are objected to or appealed are not eventually litigated; there has been very little litigation against restoration projects in eastern Oregon over the last five years.¹³ We refer to objections and appeals as simply objections throughout.

We analyzed patterns in NEPA planning and objections for all types of USFS management actions as well as the subset that are focused on timber sales

and fuel treatments. These objections are handled administratively and are not litigation. There are two clear patterns in forest restoration NEPA planning and objections. First, the total number of projects that have moved through the NEPA process declined during the years considered here (see Figure 15, page 31). This could be because the areas covered under NEPA projects are getting larger or the projects are increasing in complexity. Second, during the FFH Program, the total number of NEPA decisions objected remained roughly constant.

Timber sales and fuels treatment projects undergoing NEPA planning were identified using the methods adopted in a previous analysis.¹² We selected this subset of documents by using the Activity and Purpose Codes for timber sales green (TS), timber sales salvage (SS), fuels treatments nonactivity fuels (FN), forest products (TM), vegetation management nonforest products (VM), and fuels management (HF) in the PALS database. Similar patterns to those described above emerge when considering only the subset of NEPA planning efforts for timber sales and fuels reduction. The number of NEPA projects focusing on timber sales and fuels reduction declined during the years examined while the numbers of projects objected remained steady (see Figure 16, page 31).



Because the total number of NEPA documents declined, but the number of objections remained steady, the objection rate increased substantially. Because the rate of NEPA objections is conflated by a pattern in the total number of NEPA documents in a year (and that number is small), the rate of NEPA objections is not an especially good measure of performance. A better measure is total number

of projects objected, which has remained relatively steady between 2009 and 2014. Looking at only objections in real numbers or as a percentage of projects may not be an effective measure if project size continues to increase. With larger project areas, we would expect fewer NEPA decisions annually so that a relatively small number of objections would skew the results.

Figure 15 Total number of NEPA documents issued and decisions objected annually in all Blue Mountains national forests, 2009–2014

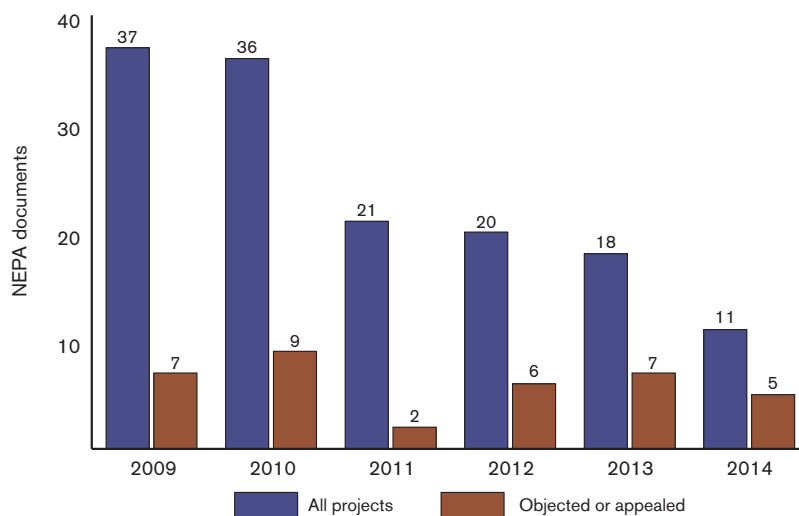
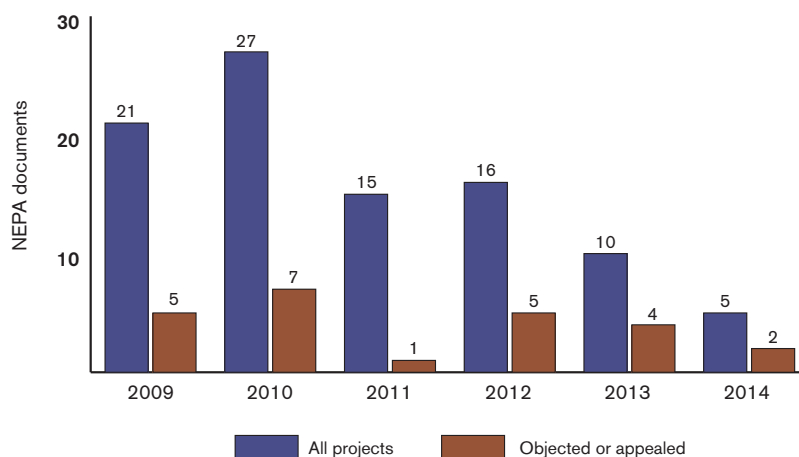


Figure 16 Total number of NEPA documents issued and decisions objected annually for timber or fuels activities in all Blue Mountains national forests, 2009–2014



Theme F: Administrative efficiency

At the outset of the FFH Program, ODF worked with the USFS to develop a Memorandum of Understanding (MOU) to activate the SFIP. As the two agencies were working on the MOU, it became apparent that the 2014 Farm Bill (and FY14 appropriations bill) would include the national expansion and permanent authorization of the Good Neighbor Authority. This agreement allows the Secretaries of Agriculture and Interior to enter into agreements with states to perform forest management activities that are authorized under a NEPA decision. This new tool has considerable flexibility to build on the SFIP as piloted in the FFH Program. Oregon Department of Forestry and the USFS will pursue a more encompassing partnership under a Good Neighbor Agreement in the late summer of 2015.

The SFIP investments were designed to test innovative approaches and discover time and cost efficiencies in project-level planning and presale implementation. Funds under the effort were adequate to evaluate component parts of project-level planning. In particular, ODF partnered with the USFS

to acquire 460,800 acres of LiDAR data and funded on-the-ground forest survey work to ground-truth the data. This is a new business practice that will allow the USFS access to higher quality data over a much larger area at lower cost.

The costs for the data collection contract portion of “common stand exams” for NEPA analyses on the Malheur National Forest are \$3.50/acre.¹⁴ The SFIP-funded LiDAR approach (including acquisition of imagery, field plots to validate data, processing and modeling) cost \$2.29/acre and results in a higher quality and long-lived product for analyses of larger landscapes. Under the “business as usual” approach, the costs for stand-level data would cost about \$1.6 million, depending on the adequacy of the existing stand exam data. The SFIP-funded LiDAR approach results in a cost savings of more than \$500,000 over that size of an area. Reductions in planning costs per acre will remain a focus of the FFH Program going forward. Other SFIP investments designed to evaluate time and cost efficiencies (such as testing new approaches to conducting cultural resource surveys) will be detailed, when finished, in future reports.



Summary and conclusions

Preliminary results suggest that the FFH Program is having a positive impact on the quality and pace and scale of restoration in the Blue Mountains. In this report, we reviewed and identified changes in performance measures from the baseline years (2009–2011) to FFH Program years (2012–2014). The outcomes of many of FFH Program investments have yet to be fully realized because of the timing and nature of this work. Several of the investments, including the development of the SFIP, the Lower Joseph Creek project, and specific projects in the TASS, have not concluded upon this writing. With that, we draw several preliminary conclusions from our analysis. The following findings are relative to the Blue Mountains national forests, unless otherwise noted:

- The number of jobs supported annually in eastern Oregon increased 16.2 percent from restoration projects between the periods 2009–2011 and 2012–2014.
- State investments in the SFIP alone (roughly half of the \$2.88 million) supported 19 jobs and generated \$2.1 million in economic activity in eastern Oregon.
- Trends in type and amount of hazardous fuels treatments were highly variable throughout the study period. Acres treated with commercial sales increased 25 percent over baseline years while other fuels treatments were flat or decreased.
- There were no clearly discernible patterns for forest and watershed health treatments. Although acres treated to improve wildlife habitat were dramatically higher in 2014, acres treated in previous years for habitat and other forest and watershed objectives fluctuated from 2009–2014.
- The volume of timber sold increased 12.5 percent and the volume of sawtimber sold increased 58 percent. The increase in total volume of timber sales can largely be attributed to significant increases in volume sold on the Malheur National Forest.
- The number of objections to NEPA timber and fuels decisions remained roughly constant. The total number of timber and fuels NEPA documents has declined during the period, possibly because of increasing size of NEPA planning areas.
- Forest collaboratives matched FFH Program grant awards to triple the investment in collaboration. Local collaboratives leveraged an additional \$787,514 to the \$395,824 they were awarded in grant funding from OWEB.
- Grant investments in collaborative capacity supported project planning and implementation on an estimated 1 million acres of national forests in eastern and southern Oregon.
- In total, Records of Decision were signed by the USFS on 137,487 acres of collaborative projects during 2012–2014. In addition, during 2012–2014, the five collaborative groups continued their work to build consensus for active management on restoration projects for which the total planning acres equate to 465,356 acres.
- Collaboratives on national forests that have received additional investment from both state and federal resources for planning capacity are reporting that they now work at larger spatial scales and on faster timelines (BMFP, HCRC and WWFC).
- Collaboratives are addressing complex socio-ecological issues including treatments in moist, mixed-conifer forests, inventoried roadless areas, riparian areas, and management of road systems.

Although most on-the-ground treatments in the Blue Mountains are just beginning to be implemented, performance measures suggest increases in on-the-ground projects and expanded economic outcomes. Additional analysis is needed to better understand how investment in accelerated restoration influences NEPA objections and appeals, whether those have any impact on the pace of restoration project implementation, and how collaboratives can increase pace and scale.

Appendix: Supplemental tables

Table 9 Federal Forest Health Program investments by national forest and type, 2013–2015

National forest	Collaborative(s) active in receiving/using investments	Collaborative Capacity Grants	State/Federal Implementation Partnership investments specific to forest	Technical assistance specific to collaborative/forest	Total investment
Wallowa-Whitman	Wallowa-Whitman Forest Collaborative (WWFC)	\$73,208 in two grants	\$430,521	\$77,800	\$581,529
Umatilla	Umatilla Forest Collaborative Group (UFCG)	\$82,125 in two grants	\$383,070	\$54,500	\$519,695
Mt. Hood	New collaborative on Barlow Ranger District	-	-	\$7,400	\$7,400
Malheur	Blue Mountains Forest Partners (BMFP)	\$123,620 in two grants	\$226,641	\$96,900	\$512,747
	Harney County Restoration Collaborative (HCRC)	\$65,586 in two grants			
		Total for collaboratives on forest: \$189,206			
Ochoco	Ochoco Forest Restoration Collaborative (OFRC)	\$51,246 in one grant	\$166,663	\$41,200	\$209,109
Deschutes	Deschutes Collaborative Forest Project (DCFP)	\$46,325 in one grant	\$26,993	\$97,600	\$179,918
Fremont-Winema	Lakeview Stewardship Group (LSG)	-	\$25,000	\$178,100	\$203,100
Rogue River-Siskiyou	Southern Oregon Forest Restoration Collaborative (SOFRC)	\$39,844 in one grant	-	\$158,900	\$269,413
	Ashland Forest Resiliency (AFR)	\$34,602 in one grant			
	Wild Rivers Coast Forest Collaborative (WRCFC)	\$36,167 in one grant			
		Total for collaboratives on forest: \$110,513			
Umpqua	-	-	-	\$6,100	\$6,100

Table 10 Fuels treatments (acres) on Blue Mountains national forests, 2009–2014

Malheur National Forest	2009	2010	2011	2012	2013	2014
Broadcast burning	8,275	3,907	6,546	3,223	5,159	7,341
Commercial sale	8,172	7,556	6,999	5,422	10,239	16,614
Pile burning	3,631	6,762	3,614	8,184	6,611	11,397
Piling, machine or hand	5,164	15,821	5,890	4,771	14,153	3,643
Pre-commercial thinning	6,196	20,020	4,287	5,685	14,826	8,055
Salvage	7,235	105	1,311	0	0	0
Surface treatments	8,799	610	61	0	238	0
Ochoco National Forest	2009	2010	2011	2012	2013	2014
Broadcast burning	8,584	4,489	4,803	5,263	2,073	2,474
Commercial sale	2,842	1,932	3,745	3,743	2,618	3,637
Pile burning	94	3,172	3,937	2,248	3,160	2,757
Piling, machine or hand	2,662	3,403	377	0	585	426
Pre-commercial thinning	7,614	5,419	2,983	1,718	3,114	6,121
Salvage	262	12	0	0	0	0
Surface treatments	588	2,512	117	0	0	1,538
Umatilla National Forest	2009	2010	2011	2012	2013	2014
Broadcast burning	6,696	3,814	5,415	5,676	4,683	1,375
Commercial sale	2,741	343	2,178	2,163	2,088	2,684
Pile burning	740	2,559	2,046	777	1,579	1,245
Piling, machine or hand	1,756	4,702	654	1,688	804	1,163
Pre-commercial thinning	4,763	5,659	2,680	2,214	1,718	3,516
Salvage	675	959	1,071	75	564	0
Surface treatments	2,071	1,737	2,158	0	1,153	1,960
Wallowa-Whitman National Forest	2009	2010	2011	2012	2013	2014
Broadcast burning	7,518	4,049	5,158	6,107	6,525	7,810
Commercial sale	4,681	4,361	1,048	2,705	4,520	2,019
Pile burning	6,713	4,906	3,924	7,408	5,012	3,097
Piling, machine or hand	6,489	5,048	4,258	3,911	4,407	2,873
Pre-commercial thinning	6,448	14,322	2,963	3,201	3,887	5,599
Salvage	81	99	0	0	0	123
Surface treatments	1,291	1,531	204	175	580	177

Table 11 **Blue Mountains forest collaborative group projects planned and decisions signed, 2012–2014**

Collaborative	Year of origin	Projects collaborating on (in planning) in 2012–2014 and acreages	Projects for which a decision was signed in 2012–2014 and acreages	Additional notes
Wallowa-Whitman Forest Collaborative (WWFC)	2012	Lower Joseph Creek (100,000 acres) East Face (47,621 acres)	None	Lower Joseph Creek planned by dedicated Blue Mountains interdisciplinary team
Umatilla Forest Collaborative Group (UFCG)	2012	Kahler Basin (32,848) Thomas Creek (15,773)	None	
Blue Mountains Forest Partners (BMFP)	2006	Soda Bear (20,000) Elk 16 (42,000) Big Mosquito (36,000) Magone (27,000) Camp Lick ¹	Damon (19,000) Soda Bear (20,000)	Obtained CFLR status in 2012 as "Southern Blues Restoration Coalition" with HCRC
Harney County Restoration Collaborative (HCRC)	2008	Wolf ² (53,386) Marshall-Devine (34,201) Upper Pine (32,021) Dove ¹	Jane (32,265) Marshall-Devine (34,201) Upper Pine (32,021)	Obtained CFLR status in 2012 as "Southern Blues Restoration Coalition" with BMFP
Ochoco Forest Restoration Collaborative (OFRC)	2012	Wolf ² (24,506)	Wolf (24,506)	
Total for Blue Mountains by end of 2014		465,356 acres in planning	137,487 acres for which decisions have been signed	

¹Not yet in NEPA²HCRC and OFRC Wolf projects are distinct from each other

Table 12 **Scorecard used to document indicators of collaborative capacity for accelerated restoration in focus groups**

Score	Working at larger spatial scales	Increased pace and streamlined consensus building	Increased complexity/diversity of projects	Level of trust
1	We work at smaller spatial scales (as defined by group and what is typical for the Forest Service on that particular national forest). Describe why and discuss both planning acres and treatment acres.	We are working on slower than typical timelines (as defined by group and what is typical for the Forest Service on that particular national forest). Describe how much slower and why, and discuss both NEPA planning and any other types of interaction with the Forest Service (pre-NEPA, post-implementation).	We don't work on ecologically and/or socially complex issues right now. Describe why not, and the current "zones of and limits to agreement."	We have a very low level of trust overall. Describe why trust is currently limited, and if this is widespread or limited to a few specific members/issues.
2	We work at typical spatial scales (as defined by group and what is typical for the Forest Service on that particular national forest). Describe why and how, and discuss both planning acres and treatment acres.	We are working on typical timelines (as defined by group and what is typical for the Forest Service on that particular national forest). Describe why and discuss both NEPA planning and any other types of interaction with the Forest Service (pre-NEPA, post-implementation).	We work on one or only a few ecologically and/or social complex issues right now and have not reached agreement on any of them. Describe them, how you are working on them, and why those, and why not more or different ones. Describe the current "zones of and limits to agreement."	We have a lower to medium level of trust overall. Describe where trust is currently limited, and if this is widespread or limited to a few specific members/issues.
3	We work at larger spatial scales than typical for the past and/or for this forest on some projects (as defined by group and what is typical for the Forest Service on that particular national forest). Describe why and how, and discuss both planning acres and treatment acres.	We are working on faster than typical timelines for some projects and issues (as defined by group and what is typical for the Forest Service on that particular national forest). Describe how much faster, why, on which kinds of projects and issues, and discuss both NEPA planning and any other types of interaction with the Forest Service (pre-NEPA, post-implementation).	We work on several ecologically and/or social complex issues right now, but have yet to reach agreement. Describe them, how you are working on them, and why those issues; and why you are not making progress. Describe the current "zones of and limits to agreement."	We have a fair level of trust overall. Describe why trust is present where it is, and how it manifests for different members and issues.
4	We work at larger spatial scales than typical for the past and/or for this forest on <u>all</u> projects (as defined by group and what is typical for the Forest Service on that particular national forest). Describe why and how, and discuss both planning acres and treatment acres.	We are working on faster than typical timelines on <u>all</u> projects and issues (as defined by group and what is typical for the Forest Service on that particular national forest). Describe how much faster, why, and discuss both NEPA planning and any other types of interaction with the Forest Service (pre-NEPA, post-implementation).	We work on several ecologically and/or social complex issues right now and have reached agreement on some or all of them. Describe them, how you are working on them, and why those issues. Describe the current "zones of and limits to agreement."	We have a high level of trust overall. Describe why trust is present, and how it manifests for different members and issues.

Table 13 Collaborative groups' self-evaluation scores for indicators of accelerated restoration capacity

Group	Working at larger spatial scales	Increased pace and streamlined consensus building	Increased complexity/diversity of projects	Level of trust
BMFP	Score: 4 Group works at larger spatial scales than typical for the past and/or for this Forest on all projects (as defined by group and what is typical for the Forest Service on that particular national forest). Size of planning areas has increased, as well as percentage of those acres treated, especially when including prescribed fire. Increasing size of planning areas was especially easy in dry forest areas where there was agreement.	Score: 4 Group works on faster than typical timelines on all projects and issues (as defined by group and what is typical for the Forest Service on that particular national forest). Addition of ID team is intended to increase pace and number of projects possible at once. Pace seems to depend on leadership from the ID team and the relationship that they have with the collaborative. Having a dedicated executive director/coordinator helps keep projects on track for the collaborative. No projects of the collaborative were litigated during 2012–2014.	Score: 4 Group works on several ecologically and/or social complex issues right now and has reached agreement on some of them. Has developed some agreement on mixed conifer and thinning trees over 21 inches in diameter under specific conditions. Has discussed riparian areas and inventoried roadless areas. Recent attendance by access interests has demonstrated the social complexity of road and travel management issues, for which there may not currently be full group agreement.	Score: 3 The group has a fair overall level of trust. Trust and respect is high among many members. Having many members living in the same community helps. The number of new Forest Service people can pose some challenges to building new relationships and trust between the group and the agency.
HCRC	Score: 2 Group works at typical spatial scales (as defined by group and what is typical for the Forest Service on that particular national forest). Watersheds remain boundary for planning areas.	Score: 3 Group works on typical timelines (as defined by group and what is typical for the Forest Service on that particular national forest) for planning, and faster timelines for implementation. The Malheur 10-Year contract has sped up implementation, with multiple timber sales offered in a year instead of staggered over several years. Use of designation by prescription in marking has helped too. No projects of the collaborative were litigated during 2012–2014.	Score: 4 Group works on several ecologically and/or social complex issues right now and has reached agreement on some of them. Have begun to work on riparian areas, have participation from the Harney County Open Roads Coalition, including more social and economic aspects, and are able to treat larger stands. Feel they have been reaching agreement on some more complex issues.	Score: 3 The group has a fair overall level of trust, but suggested possibly significant variations from person to person. There have been some changes in participation and some perceive a loss of some members.
OFRC	Score: 2 Group works at typical spatial scales (as defined by group and what is typical for the Forest Service on that particular national forest). Group has only completed one project. Wolf planning area was a watershed boundary typical for the forest. Group hopes to increase acres on next projects.	Score: 2 Group works on typical timelines (as defined by group and what is typical for the Forest Service on that particular national forest). Group began collaborating on Wolf project in 2012 at the pre-NEPA stage, and its first contracts and sales are being implemented in summer 2015. Wolf project has proceeded at typical pace for the Ochoco NF, and project withstood objections and has not been litigated. Group hopes that work put in on Wolf will increase their pace on future projects.	Score: 4 Group works on several ecologically and/or social complex issues right now and has reached agreement on some of them. Wolf watershed analysis involved committees for complex issues including riparian habitats, roads, and wildlife. Final recommendations on Wolf included support for removing trees over 21" under specific conditions with monitoring.	Score 3 The group has a fair overall level of trust. Some members of the group are willing to pilot management activities that make them uncomfortable. There continues to be commitment and relationships among diverse members.

Table 13 Cont'd Collaborative groups' self-evaluation scores for indicators of accelerated restoration capacity

Group	Working at larger spatial scales	Increased pace and streamlined consensus building	Increased complexity/diversity of projects	Level of trust
UFCG	Score: 3 and 1 Group works at typical spatial scales (as defined by group and what is typical for the Forest Service on that particular national forest) for the Kahler project; and smaller than typical scales for the Thomas Creek project. Group is working on its first two projects. Kahler project is fairly typical for a dry forest planning area. Thomas Creek project is smaller than typical planning areas and anticipated treatment area within it is considered small. However, discussion on Thomas Creek is intended to influence approximately 70,000 acres of plantations in similar condition.	Score: 2 Group works on typical timelines (as defined by group and what is typical for the Forest Service on that particular national forest). Group began working on both projects in fall 2012. Turnover in ID team staff for Kahler project delayed it by one year. Projects have not yet been signed, or reached objection stages or where they would be litigated.	Score: 3 Group works on several ecologically and/or social complex issues right now, but have yet to reach agreement. Issues on which the group works include cool, moist forest, riparian habitat conservation areas, and viability of different logging systems. They have not yet reached agreement on these issues for a completed project.	Score: 2 Group has a lower to medium level of trust overall. Trust seems to depend on the issue and project, with lower trust often displayed for the Thomas Creek project. Having members scattered across a large geographical area can challenge relationship building.
WWFC	Score: 4 Group works at larger spatial scales than typical for the past and/or for this Forest on all projects (as defined by group and what is typical for the Forest Service on that particular national forest). Group is working on its first two projects, but these planning areas are larger than typical for the Wallowa-Whitman NF.	Score: 4 Group works on faster than typical timelines on all projects and issues (as defined by group and what is typical for the Forest Service on that particular national forest). Group began collaborating on both projects in 2012. Blue Mountains ID team is moving faster than typical for the Wallowa-Whitman NF on Lower Joseph project. Projects have not yet reached objection stages or where they would be litigated.	Score: 3 Group works on several ecologically and/or social complex issues right now, but have yet to reach agreement. Group sees themselves as working on a combination of "easier" issues such as dry forest and more complex issues such as cool, moist forest types in the East Face area. They have not yet reached agreement on these issues for a completed project.	Score: 2 Group has a lower to medium level of trust overall. The group is actively building trust, but does not feel it is fully shared on all issues for all people.

Endnotes

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