

CFLR Project (Name/Number): Southern Blues Restoration Coalition/CFLN17

National Forest(s): Malheur National Forest

Responses to the prompts in this annual report should be typed directly into the template. Example information is included in red below. Please delete red text before submitting the final version.

## 1. Match and Leveraged funds:

### a. FY15 Matching Funds Documentation

Fund Source – (CFLN/CFLR Funds Expended <sup>1</sup> )	Total Funds Expended in Fiscal Year 2015(\$)
CFLN13	(5,878.73)
CFLN14	0
CFLN15	1,107,583.11

Fund Source – (Funds expended from Washington Office funds (in addition to CFLR/CFLN) <sup>2</sup> (please include a new row for each BLI))	Total Funds Expended in Fiscal Year 2015(\$)
WFHF	690,681.83

Fund Source – (FS Matching Funds (please include a new row for each BLI) <sup>3</sup> )	Total Funds Expended in Fiscal Year 2015(\$)
BD046213	24,047.45
WFHF	674,141.17
CMRD	30,596.02
NFTM	212,796.18
NFVW	119,100.03
NFWF	15,297.19
<b>TOTAL</b>	<b>11,045,382</b>

Fund Source – (Funds contributed through agreements <sup>4</sup> )	Total Funds Expended in Fiscal Year 2015(\$)
High Desert Partnership/Oregon Watershed Enhancement Board	47,430.00
Oregon State University	22,395.03
OYCC	18,000
Rocky Mountain Elk Foundation	2,214.72
Sustainable Northwest, Patrick Shannon	25,000
Volunteer (Wilderness)	7,382.40
Western Environmental Law Center, Susan Jane Brown	163,694

<sup>1</sup> This amount should match the amount of CFLR/CFLN dollars obligated in the PAS expenditure report. Include prior year CFLN dollars expended in this Fiscal Year.

<sup>2</sup> This value (aka carryover funds or WO unobligated funds) should reflect the amount expended of the allocated funds as indicated in the FY15 program direction, but does not necessarily need to be in the same BLIs or budget fiscal year as indicated in the program direction.

<sup>3</sup> This amount should match the amount of matching funds obligated in the PAS expenditure report. These funds plus the Washington Office funds (unobligated funds) listed above should total the matching funds obligated in the PAS report.

<sup>4</sup> Please document any partner contributions to implementation and monitoring of the CFLR project through an income funds agreement (this should only include funds that weren't already captured through the PAS job code structure for CFLR matching funds). Please list the partner organizations involved in the agreement.

Fund Source – (Funds contributed through agreements <sup>4</sup> )	Total Funds Expended in Fiscal Year 2015(\$)
<b>Total</b>	<b>572,799.97</b>

Fund Source – (Partner In-Kind Contributions <sup>5</sup> )	Total Funds Expended in Fiscal Year 2015(\$)
AmeriCorps	44,294.40
Blue Mountains Forest Partners	191,097
Burns-Paiute Tribe	3,749
Grant County Bird Club	158.42
Harney County Restoration Collaborative/High Desert Partnership	47,385

Service work accomplishment through goods-for services funding within a stewardship contract (For Contracts Awarded in FY15)	Totals(\$)
Total amount of stewardship credits charged for contracts awarded in FY15 <sup>6</sup>	0.00
Total revised credit limit for contracts awarded in FY15 <sup>7</sup> Use	0

Service work accomplishment through goods-for services funding within a stewardship contract (For Contracts Awarded Prior to FY15)	Totals(\$)
Total amount of stewardship credits charged in FY15 <sup>8</sup>	663,315.80
Total revised credit limit for open and closed contracts awarded and previously reported prior to FY15 <sup>9</sup>	1,356,309

**b. Please provide a narrative or table describing leveraged funds in your landscape in FY2015** (one page maximum). Leveraged funds refer to funds or in-kind services that help the project achieve proposed objectives but do not meet match qualifications. Examples include but are not limited to: investments within landscape on non-NFS lands, investments in restoration equipment, worker training for implementation and monitoring, and purchase of equipment for wood processing that will use restoration by-products from CFLR projects. See “Instructions” document for additional information.

Description of item	Where activity/item is located or impacted area	Estimated total amount(\$)	Forest Service or Partner Funds?	Source of funds
n/a	Landscape treatment units throughout the CFLR project area	24,000	Forest Service funds	WFHF/BDBD
UTVs which meet new safety specifications	n/a	n/a	n/a	n/a

<sup>5</sup> Total partner in-kind contributions for implementation and monitoring of a CFLR project. Partner contributions for Fish, Wildlife, Watershed work can be found in WIT database. Please list the partner organizations that provided in-kind contributions.

<sup>6</sup> This should be the amount in the “stewardship credits charged” column at the end of the fiscal year in the TSA report TSA90R-01.

<sup>7</sup> This should be the amount in contract’s “Progress Report for Stewardship Contracts, Integrated Resources Contracts or Agreements” in cell J46, the “Revised Credit Limit,” as of September 30. Additional information on the Progress Reports is available in CFLR Annual Report Instructions document.

<sup>8</sup> This should be the amount in the “stewardship credits charged” column at the end of the fiscal year in the TSA report TSA90R-01.

<sup>9</sup> This should be the amount in each contract’s “Progress Report for Stewardship Contracts, Integrated Resources Contracts or Agreements” in cell J46, the “Revised Credit Limit.” For open contracts, this should be as of September 30. For closed contracts, this should be at the time of contract closure.

Description of item	Where activity/item is located or impacted area	Estimated total amount(\$)	Forest Service or Partner Funds?	Source of funds
IPads for improved data collection	Implementation monitoring	\$3,000	Forest Service Funds	WFHF
Filled a 3-yr Fire Ecologist position which is shared with The Nature Conservancy	Analysis of collected monitoring data towards adaptively managing our CFLR projects	300,000	Evenly split between Forest Service and TNC funds	WFHF, NFTM and The Nature Conservancy

In 2015, the primary contractor on the stewardship contract doing a majority of the work in the SBRC project was able to add equipment to broaden implementation capabilities and keep up with increased workload. The continual sustained yield of small diameter material has led to the establishment of a holding facility in Long Creek, OR with plans to create a chipping facility there. Negotiations have also begun on a potential torrefication plant to be located in John Day, OR which could utilize 130,000 tons of biomass towards energy production each year. In all, this has contributed to an approved expansion of the SBRC project area in FY15.

**2a. Discuss how the CLFR project contributes to accomplishment of the wildland fire goals in the 10-Year Comprehensive Strategy Implementation Plan and describe the progress to date on restoring a more fire-adapted ecosystem, as identified in the project’s desired conditions. This may also include a description of the current fire year (fire activity that occurred in the project area) as a backdrop to your response (please limit answer to one page).**

The Southern Blues Restoration Coalition (SBRC) project work plan describes four restoration goals that tie in closely with all of the performance measures described in the *10 Year Comprehensive Strategy Implementation Plan*. From restoring landscape resiliency and improving collaborative and social capacity to increasing economic capacity and increased efficiency, the accomplishments this year moved the landscape towards meeting the performance measures outlined in the Comprehensive Strategy.

A total of over 44,360 acres of vegetation and fuels treatments have been completed within the SBRC project area in the first four years of the project. These treatments included everything from commercial harvest and biomass removal to landscape underburning. These treatments had integrated benefits of restoring landscape resiliency for wildlife, soil, watershed and range forage. Specific accomplishments were seen for wildlife and fisheries in the form of aspen restoration, riparian fencing and road closures.

The forest is currently assessing the effectiveness of fuels treatments that were impacted by wildfires this summer. Preliminary results from this work are expected in the second quarter of FY16. The lessons learned from these fires will inform future fuels treatments in the CFLR area and beyond.

With the support of CFLN funding, the Forest was able to continue awarding work to the Malheur 10 Year Stewardship contract which will continue to move the local communities a long way towards increased economic capacity and the Forest towards increased efficiencies. These are discussed in more depth throughout this report.

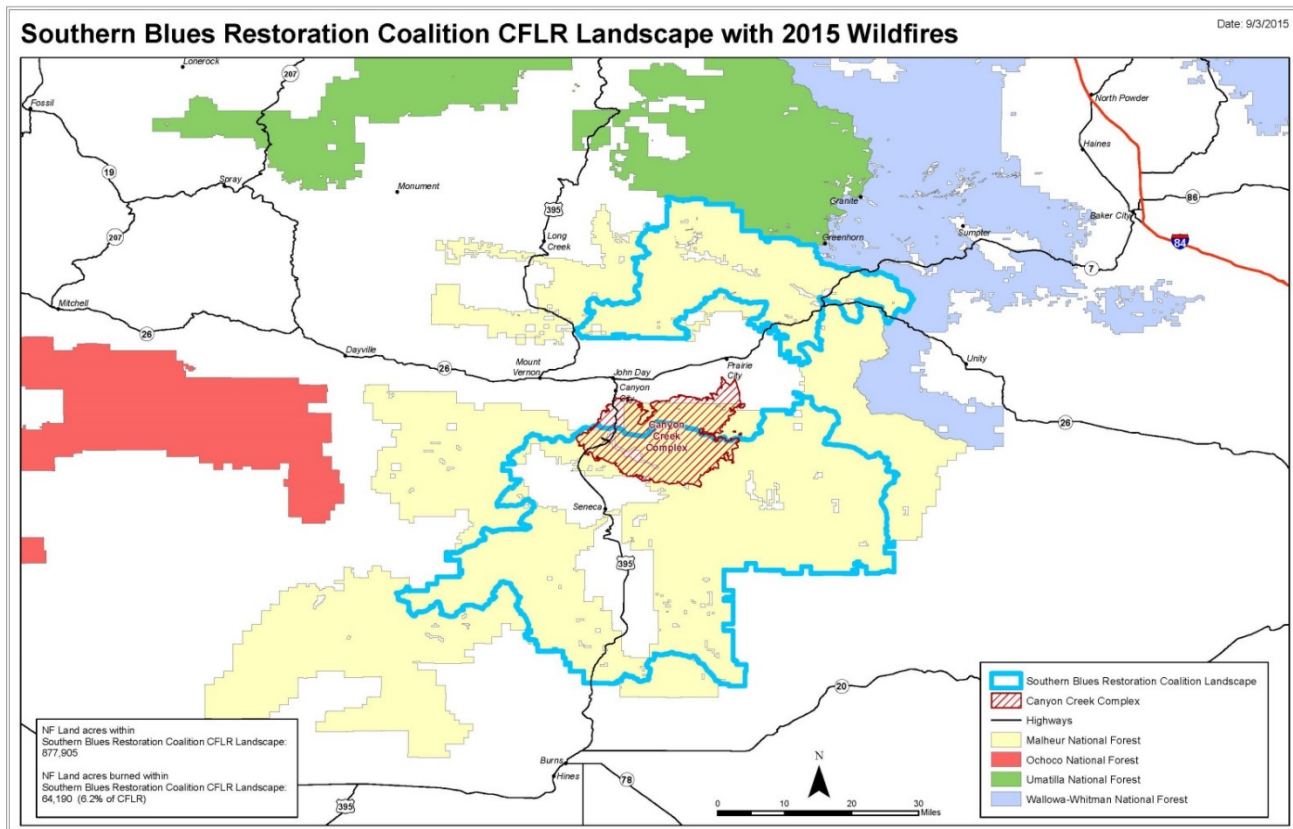
**2b. In no more than two pages (large landscapes or very active fire seasons may need more space), describe other relevant fire management activities within the project area (hazardous fuel treatments will be documented in Question #6:)**

With the expansion of the SBRC landscape in 2015, the total acres within the landscape of Malheur NF fire protection is 877,288 acres or approximately 51% of the entire Malheur NF. Pre-suppression expenditures for the year totaled \$2.5 million within the SBRC landscape. There were a total of 40 fires in the SBRC project area for a total of 64222.5 acres

burned. The vast majority of those acres were burned in one large fire, the Canyon Creek Complex at 64,190 acres. The initial attack success rate for fires within the SBRC was 95%

The Canyon Creek Complex started as two fires on August 12<sup>th</sup> with an early morning lightning storm. One of the fires started in the SBRC project area, the other started in the Strawberry Mountain Wilderness area, just outside the SBRC boundary. A combination of very challenging fire weather and drought conditions made both fires difficult to contain. A very strong wind event on August 14<sup>th</sup> pushed both fires very hard, and by the end of the day, over 33,000 acres had burned on Forest Service, BLM and private lands. More than 30 homes were destroyed on that day along with the loss of a main power line. Over the next 19 days as the critical fire weather pattern continued, the fire grew to just over 110,000 acres destroying a total of 43 homes. In the end, 64,190 acres of the SBRC project area were impacted by the fire which is approximately 6.2% of the SBRC project area. The suppression costs for the Canyon Creek Fire are near \$32 million with the Forest Service share being about \$22 million.

A Burned Area Emergency Response Team (BAER) was brought in following the fire to assess potential problems caused by the fire related to soil erosion and increased runoff causing flooding. Their assessment found that as much as 45% of the SBRC project impacted by the fire burned with moderate to high soil severity and approximately 55% burned with low fire severity. The BAER assessment team recommended several treatments to help stabilize the soils totaling approximately \$4.4 million to implement.



The Canyon Creek Complex impacted 9,038 acres of completed fuels treatments within the SBRC area. The Forest is working on a detailed assessment of the effectiveness of those treatments. The assessment should be completed in early 2016. Preliminary assessments recognize that fire weather conditions at the time when many of the treatment areas were impacted were at or above the 97<sup>th</sup> percentile conditions and had been experiencing severe drought for the past several years. In discussions with the collaborative groups who are part of the SBRC, they realize that to design treatments to make stands resilient to those conditions would require much more intensive treatments. Many treatment

areas were in a condition to effectively backfire from while maintain lower severity. Many areas had the mechanical treatments completed (thinning and piling) and the piles burned, but had not yet received the final underburning treatment. It appears that the final assessment will show that the underburning treatment that is prescribed for many of the landscapes within the SBRC project is very effective at increasing resiliency.

**3. What assumptions were used in generating the numbers and/or percentages you plugged into the TREAT tool? Information about Treatment for Restoration Economic Analysis Tool inputs and assumptions available here – <http://www.fs.fed.us/restoration/documents/cflrp/R-CAT/TREATUserGuide10112011.pdf>.**

The numbers came directly from the end of year accomplishments and expenditure reports. The product distribution percentages came from information from TIMS and from the different contracts used. FTE were compiled from multiple personnel by dividing aggregated personnel expenditures by the mean (GS6/1) salary. Assumptions are based on all of the work being completed within the year it was funded.

**FY 2015 Jobs Created/Maintained (FY15 CFLR/CFLN/ WO carryover funding):**

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income <sup>10</sup>
Commercial Forest Product Activities	200	367	13,103,745	19,575,586
Other Project Activities	22	28	943,302	1,100,952
<b>TOTALS</b>	<b>222</b>	<b>395</b>	<b>14,047,047</b>	<b>20,676,538</b>

**FY 2015 Jobs Created/Maintained (FY15 CFLR/CFLN/ WO carryover and matching funding):**

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income <sup>11</sup>
Commercial Forest Product Activities	200	367	13,103,745	19,575,586
Other Project Activities	44	52	1,512,397	1,765,209
<b>TOTALS</b>	<b>244</b>	<b>419</b>	<b>14,616,142</b>	<b>21,340,795</b>

**4. Describe other community benefits achieved and the methods used to gather information about these benefits. How has CFLR and related activities benefitted your community from a social and/or economic standpoint? (Please limit answer to two pages).**

**Blue Mountains Forest Partners and Harney County Restoration Coalition**

We are just now getting to a point in CFLR that we can capture reliable quantitative socioeconomic data. The Ecosystem Workforce Program (EWP) recently completed an evaluation on initial economic impacts from the SBRC work, which is highlighted below. As just one example of what they found: From 2004 to 2011, Malheur National Forest contracts with local companies supported around 20 private sector full- and part-time jobs each year. In 2012 and 2013, increased local contracting for restoration supported around 50 private sector full- and part-time jobs. We don't have similar reports for 2014 or 2015 yet. Still, actual restoration work on the ground remained steady or increased since the 2012-2013 period, so there is good reason to believe the 250% increase in full- and part-time jobs experienced during that period remain constant if not increase since then. This has obvious positive impacts for other local businesses in

<sup>10</sup> Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet, "Impacts-Jobs and Income" tab. Spreadsheet and directions available at <http://www.fs.fed.us/restoration/CFLR/submittinproposals.shtml#tools>.

<sup>11</sup> Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet, "Impacts-Jobs and Income" tab. Spreadsheet and directions available at <http://www.fs.fed.us/restoration/CFLR/submittinproposals.shtml#tools>.

the area. Anecdotally, Grant County school board members have shared that for the first time in years some area school districts are experiencing an uptick in student enrollment, which they attribute to increased restoration and job related activities on the Malheur. Similarly, more community members have shared their increased appreciation for what's happening with CFLR on the Malheur, and approached our Collaboratives about getting involved because they feel it will help them—e.g., with grazing permits. Finally, other local and resource related entities are starting to think about how to develop collaborative partnerships that will facilitate their interests and responsibilities on a much broader scale.

*Particularly important to appreciate in all this is that community members and organizations increasingly associate community and organizational benefits with the approach to restoration work exemplified on the Malheur under CFLR.*

In addition to increased jobs and other associated positive socioeconomic opportunities for local communities, CFLR has benefitted agency and collaborative efforts by fostering a context that facilitates a more informed and thoughtful approach to public land management generally. One example of this involves the willingness of environmental and industry groups to revisit post-fire management activities and salvage logging—historically a very contentious issue! To date our conversation with the Malheur about this issue is one that envisions post-fire management as possibly a tool that provides some economic recovery, but primarily prioritizes wildlife and resource needs in an effort to restore fire damaged landscapes. Another example involves our work with the Malheur to address management concerns related to goshawk nest and post-fledgling sites. Current policy or direction in this area frequently hinders restoration activities as well as the agency's ability to address the long-term habitat needs of goshawks in a responsible manner. Blue Mountain Forest Partners (BMFP) held two science workshops in the summer of 2015 that tackled post-fire and goshawk management challenges. They were well attended, fruitful, and promise to move these issues forward in a manner that benefits public land management and local communities that rely on natural resources. (Flyers in appendices.)

CFLR has helped enhance the restoration context and provided additional impetus to approach land management activities in a more responsible manner.

CFLR funding, focus, and expectations have enhanced our work relationship with the Malheur National Forest. This is reflected in better coordination and communication between the Malheur and both BMFP and HCRC, as well as increased trust. One consequence of this is that the Malheur's scope of realistic work is large and consistent enough that contractors can confidently "tool" up knowing there's a much better chance their investments will prove worthwhile over time (personal conversations). That is significant. Another consequence is that we've seen a 3-fold increase in volume coming off the forest and going to area mills since 2012 (EWP reports referenced in question 15).

CFLR has helped bring about a more effective, mature, and publicly involved approach to public land management on the Malheur with significant socioeconomic benefits for area communities.

Additional mill and biomass capacity would increase return on CFLR investment and increase socioeconomic benefits to area communities. Only one mill operates locally, and it can't handle everything that comes off CFLR projects. It targets ponderosa pine and is tooled to handle saw log sizes down to a 6- or 8-inch top. That focus and capacity addresses only part of what we need to remove from the forest, species and size wise, if we are to create resilient landscapes. Increased mill or industrial capacity that readily handles non-pine species found in the area, as well as smaller diameter material and biomass, would lower restoration costs and significantly increase community benefits by further solidifying existing jobs, creating more, and diversifying the value of natural resource products coming off federal private lands in the area.

Additional mill and biomass capacity would enhance CFLR investment on public lands, diversify natural resource values considerably, and benefit local communities significantly.

In FY15, the Blue Mountain Forest Partners matched CFLRP funds (\$6,000) to commission a report of socio-economic impacts of CFLRP implementation, focusing on data from 2012 and 2013. This study was completed by researchers with the Ecosystem Workforce Program at Oregon State University. It is an in-depth analysis comparing impacts to the local communities after the initial phases of the CFLR project to the four years preceding CFLR investment.

This report reviews a number of factors, from where forest service contract investments were focused to trends in local investment and distribution of timber volume sales. Highlights from this report found that:

- Business located in Grant and Harney Counties were able to capture about 2/3 of the value of the service contracts for CFLR work, a larger share than in recent years.
- Local businesses purchased more than 57 percent of the timber volume sold from the SBRC project. When the Stewardship Contract is included, this number jumps to 89 percent.
- Restoration work supported about 38 jobs per year in Grant and Harney Counties.<sup>12</sup>

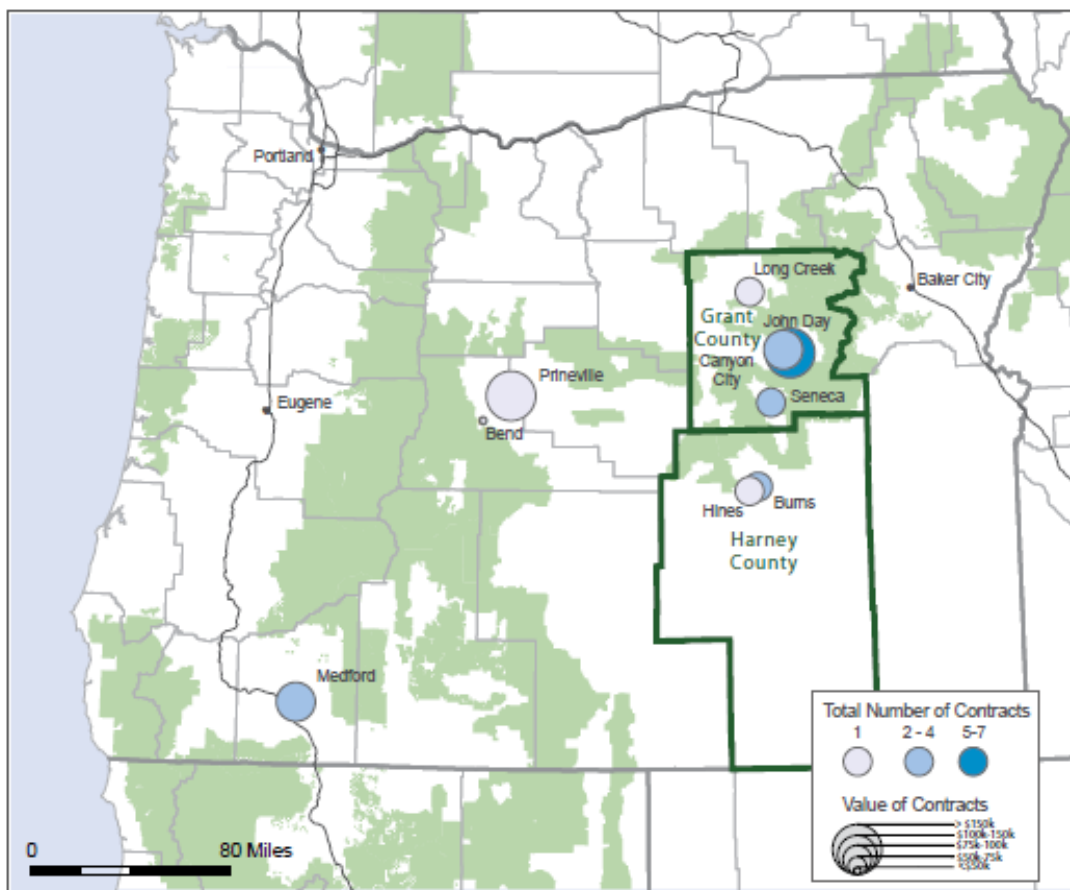


Figure 1. Origin of business with contracts for work related to the SBRC project, fiscal years 2012-2013 in White, E., et. al. Social and Economic Monitoring for the SBRC Project FY2012-2013, 24 pp.

<sup>12</sup> White, E.M., E.J. Davis, and C. Moseley. 2015. Social and economic monitoring for the Southern Blues Restoration Coalition Project, Fiscal years 2012 and 2013. Ecosystem Workforce Program Working Paper #59. 24 p. Available: [http://ewp.uoregon.edu/sites/ewp2.uoregon.edu/files/WP\\_59\\_0.pdf](http://ewp.uoregon.edu/sites/ewp2.uoregon.edu/files/WP_59_0.pdf)





**5. Based on your project monitoring plan, describe the multiparty monitoring process. What parties (who) are involved in monitoring, and how? What is being monitored? Please briefly share key broad monitoring results and how results received to date are informing subsequent management activities (e.g. adaptive management), if at all. What are the current weaknesses or shortcomings of the monitoring process?** (Please limit answer to two pages. Include a link to your monitoring plan if it is available).

Multi-party monitoring of the ecological, economic, and social impacts of CFLRP implementation is being undertaken by a multi-disciplinary team that includes agencies, academic institutions, and non-governmental organizations. The following team members are currently undertaking monitoring work as part of the Southern Blues CFLRP Multi-Party Monitoring Program: Oregon State University College of Forestry (OSU), University of Oregon Ecosystem Workforce Program (EWP), Malheur National Forest (MNF), USDA Forest Service Rocky Mountain Research Station (RMRS), USDA Forest Service Area Ecology Program (Ecology), USDA Forest Service Pacific Northwest Region Headquarters, USDA Forest Service Pacific Northwest Research Station (PNWRS), North Fork John Day Watershed Council (NFJDWC), Grant Soil And Water Conservation District (GSWCD), BMFP, and HCRC.

The Southern Blues CFLRP Multi-Party Monitoring Program currently consists of the following monitoring sub-programs (principal investigators in parentheses): Forest vegetation and fuels (OSU), white-headed woodpecker (RMRS), aspen (MNF), watershed restoration—riparian areas (Ecology), watershed restoration—fish passage (MNF/PNWRS), invasive species (NFJDWC/GSWCD/MNF), socio-economic monitoring (EWP/BMFP), multi-party field visits and collaborative effectiveness (BMFP/HCRC).

Forest vegetation and fuels (FVF), white-headed woodpecker (WHWO), fish passage, invasive species, socio-economic monitoring, multi-party field visits, and collaborative effectiveness programs are in their second year of implementation. The FVF, invasive species, and WHWO programs which have a significant field data collection component recently completed their second year of field data collection and have limited pre- and post-restoration treatment data that is currently being analyzed and synthesized. The monitoring program anticipates delivery of reports and other science and technical products beginning in spring 2016. The primary mechanisms by which monitoring findings will be communicated to managers and incorporated into an adaptive management framework are summarized below.

**SBRC Multiparty Monitoring Metrics and Delivery Status**

<b>Product</b>	<b>Delivery status</b>
Regular informal communication between monitoring principal investigators and MNF interdisciplinary team members, MNF leadership, and membership of the BMFP and HCRC.	Ongoing
Regular presentations to BMFP and HCRC full group meetings.	Four completed to date, minimum of 6 in 2016
Annual monitoring reports for MNF and BMFP	First scheduled for March 2016
Annual monitoring summit: One day meeting for monitoring PIs, managers, stakeholder groups, scientists, and the general public.	First scheduled for March 2016

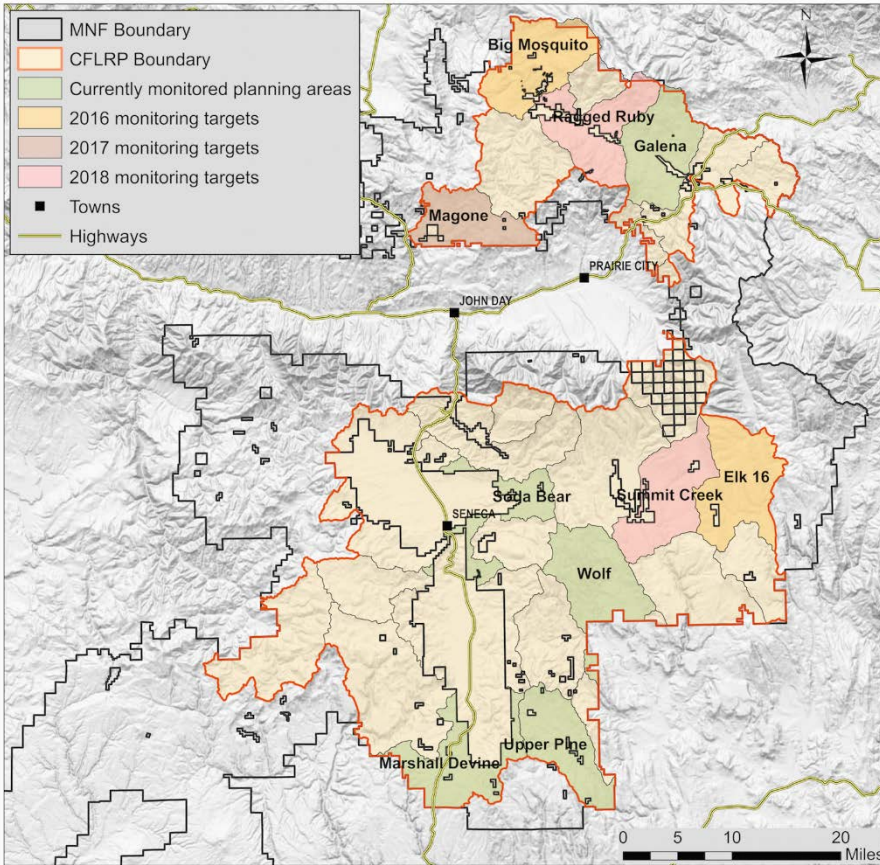
## Key accomplishments of 2015 monitoring work

Product	Delivery status
Forest vegetation and fuels (OSU)	The FVF crew completed data collection in 194 plots in 28 units within five different project areas (Marshall Devine, Upper Pine, Soda Bear, Galena and Wolf). 2015 field data collection combined with 2014 field data collection efforts has resulted in a network of 259 permanent plots in 33 randomly selected treated and untreated stands in five different CFLRP planning areas. OSU and BMFP developed a web page describing FVF monitoring, which includes links to the FVF monitoring plan (see: <a href="http://bluemountainsforestpartners.org/work/multiparty-monitoring/">http://bluemountainsforestpartners.org/work/multiparty-monitoring/</a> )
White-headed woodpecker (RMRS)	The white-headed woodpecker field crew completed point count surveys, nest searches, nest monitoring, for woodpeckers at 30 2.7 km transects within restoration planning areas on the south end of the Malheur NF. Individual bird and nest detection data will be used to compare demographic trends between untreated and treated areas. Vegetation data is being used to describe the forest structural and compositional elements associated with white headed woodpecker habitat.
Watershed restoration—riparian areas (Ecology)	Field crews implemented National Riparian Vegetation Monitoring Core Protocols in a reach of Wolf Creek where riparian vegetation is being treated to improve riparian function.
Watershed restoration—fish passage (MNF/PNWRS)	Fish passage monitoring is using pit-tagged fish to monitor fish movement through re-connected aquatic reaches.
Invasive species (NFJDWC/GSWCD/MNF)	A partnership between the Malheur NF, the local watershed council, and the local soil and water conservation district is monitoring the occurrence and distribution of invasive plants/noxious weeds at project and landscape scales. A variety of different treatments are being tested to control invasive species. To date, 379 monitoring sites have been established to monitor spread and treatment of invasive plants.
Socio-economic monitoring (EWP/BMFP)	EWP worked with BMFP to produce a report (“Social and Economic Monitoring for the Southern Blues Restoration Coalition Project, Fiscal Years 2012 and 2013”) that will serve as a baseline to document socio-economic change from CFLRP implementation in Grant and Harney counties.
Multi-party field visits and collaborative effectiveness (BMFP)	BMFP led 12 different field trips involving 212 participants. BMFP completed a report summarizing stakeholder conclusions about post-treatment CFLRP projects based on notes from 2014 field trips. BMFP organized two science forums involving more than 100 scientists, managers, stakeholders and members of the general public about a) goshawk habitat management, b) post-fire management. BMFP engaged a consultant to conduct structured interviews of BMFP and Forest Service personnel that describes recommendations to improve collaboration within an adaptive management framework.

The multi-party monitoring program has been very successful to date, particularly with respect to field data collection, especially data related to forest vegetation, fuels, and wildlife habitat. We have not identified significant weaknesses or shortcomings of our monitoring program. However, challenges that the monitoring team is currently addressing include

developing robust databases compatible with Forest Service corporate databases, adapting and developing new fire behavior modeling tools, and in general creating the capacity to analyze, synthesize, and effectively communicate information from large datasets. Developing information that provides robust answers to monitoring questions takes considerable time, and our team is constantly challenged to build support, both fiscal and political, for long-term organizational commitments to our monitoring program. Monitoring data has not yet been used within an adaptive management framework, although we anticipate monitoring results will begin informing management beginning in 2016.

Map 1. Current and planned FVF field data collection 2014-2018.



6. FY 2015 accomplishments

Performance Measure	Unit of measure	Total Units Accomplished <sup>13</sup>	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>14</sup>
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0		
Acres of forest vegetation established FOR-VEG-EST	Acres	933	\$111,960	CFLN, NFWW, RTRT, CWK2

<sup>13</sup> Units accomplished should match the accomplishments recorded in the Databases of Record.

<sup>14</sup> Please use a new line for each BLI or type of fund used. For example, you may have three lines with the same performance measure, but the type of funding might be two different BLIs and CFLR/CFLN.

Performance Measure	Unit of measure	Total Units Accomplished <sup>13</sup>	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>14</sup>
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2929.7	\$351,564	CFLN, RTRT, SSCC, NFWW
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	195.6	\$107,580	CFLN, NFWW, WFHF, OYCC
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	n/a	n/a
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	0	n/a	n/a
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	0	n/a	n/a
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	0	n/a	n/a
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	0	n/a	n/a
Acres of rangeland vegetation improved RG-VEG-IMP	Acres	561.8	\$92,697	CFLN, NFWW, RBRB
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	0	n/a	n/a
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	0	n/a	n/a
Miles of road decommissioned RD-DECOM	Miles	0	n/a	n/a
Miles of passenger car system roads improved RD-PC-IMP	Miles	0	n/a	n/a

Performance Measure	Unit of measure	Total Units Accomplished <sup>13</sup>	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>14</sup>
Miles of high clearance system road improved RD-HC-IMP	Miles	0	n/a	n/a
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	0	n/a	n/a
Miles of system trail maintained to standard TL-MAINT-STD	Miles	19.9	\$15739.45	CFLN, CMTL, OYCC, AmeriCorps
Miles of system trail improved to standard TL-IMP-STD	Miles	0	n/a	n/a
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles	75.2	\$13,536	CFLN, CMRD
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	1395.3	0	CFLN, NFTM, NFVW, WFHF
Volume of Timber Harvested TMBR-VOL-HVST	CCF	37273.5	0	CFLN, NFTM, NFVW, WFHF
Volume of timber sold TMBR-VOL-SLD	CCF	75270.1	\$2,161,757	CFLN, NFTM, NFVW, WFHF
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	10722.9	\$116,886	CFLN, NFTM, NFVW, WFHF
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	13237.8	\$2,024,722	CFLN, RTRT, SSCC, NFVW, NFTM, WFHF

Performance Measure	Unit of measure	Total Units Accomplished <sup>13</sup>	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>14</sup>
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	4796.8	\$599,600	CFLN, RTRT, SSCC, NFWW, NFTM, WFHF
Number of priority acres treated annually for invasive species on Federal lands SP-INVSP-FED-AC	Acres	0	n/a	n/a
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres	0	n/a	n/a

**7. FY 2015 accomplishment narrative – Summarize key accomplishments and evaluate project progress.**  
(Please limit answer to three pages.)

**What accomplishments are you and your partners most proud of in the last year? Example questions to think about:**

By the end of the fiscal year 9,875 acres (footprint) of vegetation treatments to restore the landscapes resiliency, improve wildlife habitat and restoring watershed condition were accomplished with a combination of service contract, stewardship contracts, partnership in-kind and force account work.

The third task order on the Malheur National Forest 10 Year Stewardship Contract was negotiated and awarded this year. Wildfire activity delayed one portion of the planned task order which will now be included in FY16. The contract allows for more restoration work as additional funds become available, however some work that had been reserved for the 10 year stewardship contract in the past is now reserved for other contracting opportunities, offering the forest better leveraging and widening the scope of investment potential in the area. This contract continues the help needed to meet the restoration goals of the SBRC proposal as well as providing local jobs for both the contractors and the local forest products processing facilities in the community.

With a major, large fire affecting not only the heart of Grant County but some of our earliest collaborative projects as well, there has been considerable interest in assessing the effectiveness of our treatments in this area. In the early stages of the fire, the Regional and National offices of the Forest Service provided incredible support in securing outside assistance to conduct an objective Fuels Treatment Assessment for the Canyon Creek Complex. This work will not only continue our commitment to a transparent, learning environment but will directly inform future treatments both inside and outside of our CFLR project area.

Our partners continued to be a big player in the success of the project this year. The members of the Southern Blues Restoration Coalition provided important feedback on the effectiveness of the activities for adaptive management. Partners such as Susan Jane Brown (WELC), Patrick Shannon (SNW), Dave Hannibal (Grayback Forestry), Jack Southworth, Zach Williams, Mark Webb along with many others continue in the role of advocating for SBRC through educating other coalition members and challenging the Forest to constantly look for more efficient ways to conclude its business.

In other examples of leveraging, the Malheur partnered with the Nature Conservancy to hire a shared Fire Ecologist. This new position will be a key player in providing guidance and oversight of the many monitoring and research projects which are informing our treatments and our prioritization models.

Oregon OYCC youth crews helped complete several of the wildlife habitat improvement projects including aspen and riparian protection, riparian planting, building fence exclosures and installing road closure gates or slashing in roads. The youth crews also helped the Forest Service wildlife biologist with their monitoring of aspen stands, birds and the effectiveness of road closures.

The Grant County Bird Club assisted with sandpiper surveys as part of a joint effort with this local club, the Malheur National Forest, and Oregon Department of Fish and Wildlife to determine if sandpipers still exist in the high elevation grasslands within the SBRC project area.

An AmeriCorps team worked on the Malheur assisting with a number of projects in the CFLR area, including riparian protection and thinning projects.

CFLN funds were used to hire additional summer employees to help prepare the many large contracts awarded this year. Fire crews worked the off season in the SBRC project either completing fuels reduction activities or preparing contracts. The collaborative groups completed their multi-party monitoring plan this and began to fully implement the plan. CFLN and match funds were also used to complete implementation monitoring of the many activities completed this year.

**8. Describe the total acres treated in the course of the CFLR project (cumulative footprint acres; not a cumulative total of performance accomplishments). What was the total number of acres treated?<sup>15</sup>**

Fiscal Year	Total number of acres treated (treatment footprint)
Total as of the end of FY15	44360
FY10, FY11, FY12, FY13, FY14, and FY15 (as applicable- projects selected in FY2012 may will not have data for FY10 and FY11; projects that were HPRP projects in FY12, please include one number for FY12 and one number for FY13 (same as above))	FY10 – N/A FY11 – N/A FY12 – 7,776 FY13 – 12,113 FY14 – 14,596 FY15 – 9,875

Please briefly describe how you arrived at the total number of footprint acres: what approach did you use to calculate the footprint?

We include prescribed fire treatments that were completed (under burned and pile burned). The assumption being that once we have put fire on the ground, we have met nearly all of our goals for restoration on that piece of ground. We also include our invasives and tree planting projects for the same reason. Activities that report in miles, such as road or trail work, are not accounted for in these footprint acres.

From FY12-14, contracted acres that were accomplished\_(contract awarded) were included if the work contracted for would get the unit most or all of the way towards meeting the goals for restoration. In all cases these were stewardship contracts. Our approach towards the stewardship contract changed significantly in FY15 where we are not including all of the restoration activities in the same contract.

<sup>15</sup> This metric is separate from the annual performance measurement reporting as recorded in the databases of record. Please see the instructions document for further clarification.

**9. Describe any reasons that the FY 2015 annual report does not reflect your project proposal, previously reported planned accomplishments, or work plan. Did you face any unexpected challenges this year that caused you to change what was outlined in your proposal? (please limit answer to two pages).**

In 2015 the Southern Blues Restoration Coalition Project did not meet the annual goals set for many of the performance measures. We continued to see improvements in invasive weed treatments and road related maintenance activities. Many of our activities were hampered by the Canyon Creek Complex, which became the focus for forest work for much of our field season, both for our fire crews as well as resource specialists assisting during the fire as Resource Advisors (READs) and after the fire with critical rehabilitation efforts. Landscape scale burns took place only in the first quarter of 2015. While our spring burn window typically provides our main opportunities for underburning, conditions were already very dry during the spring and managers did not feel confident that ecological objectives would be met.

Treatments improving riparian habitat are still behind the estimates made in the proposal. This was the first year of implementation on the Forest Wide Aquatic Environmental Assessment (EA). This EA provides many new opportunities for aquatic restoration in the SBRC project area. Activities include fish passage restoration, large wood placement, livestock fencing, riparian vegetation treatments and road and trail erosion control. We also expect to see increases in riparian treatments going forward as we get ahead on the higher cost mechanical vegetation treatments.

We remain behind on miles of road decommissioning. As with riparian treatments, the mechanical treatments need to occur before the road decommissioning will take place.

**10. Planned FY 2017 Accomplishments<sup>16</sup>**

Performance Measure Code <sup>17</sup>	Unit of measure	Planned Accomplishment	Amount (\$)
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	
Acres of forest vegetation established FOR-VEG-EST	Acres	5000	250000
Acres of forest vegetation improved FOR-VEG-IMP	Acres	5000	750000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	300	90000
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	n/a	n/a

<sup>16</sup> Please note that planned accomplishments are aggregated across the projects to determine the proposed goals for the program's outyear budget justification. These numbers should reflect what is in the CFLRP work plan, with deviations described in question 12.

<sup>17</sup> Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2017 is available. Use actual planned funding if quantity is less than specified in CFLRP project work plan.



Performance Measure Code17	Unit of measure	Planned Accomplishment	Amount (\$)
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	5000	250000
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	n/a	n/a
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	12	45000
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	5000	250000
Acres of rangeland vegetation improved RG-VEG-IMP	Acres	5000	250000
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	165	25000
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	115	16000
Miles of road decommissioned RD-DECOM	Miles	3	15000
Miles of passenger car system roads improved RD-PC-IMP	Miles	n/a	n/a
Miles of high clearance system road improved RD-HC-IMP	Miles	n/a	n/a
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	3	187500
Miles of system trail maintained to standard TL-MAINT-STD	Miles	n/a	n/a
Miles of system trail improved to standard TL-IMP-STD	Miles	20	17500
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles	75	15000

Performance Measure Code <sup>17</sup>	Unit of measure	Planned Accomplishment	Amount (\$)
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	2500	0
Volume of Timber Harvested TMBR-VOL-HVST	CCF	0	0
Volume of timber sold TMBR-VOL-SLD	CCF	120000	0
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	15000	150000
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	15000	1950000
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	15000	1950000
Number of priority acres treated annually for invasive species on Federal lands SP-INVSP-FED-AC	Acres	0	n/a
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres	0	n/a

**11. Planned FY 2017 accomplishment narrative** (no more than 1 page).

The efforts to increase the pace of restoration continue. With the help of local and state elected officials and the Oregon Governor's Office, the goal is to sustain or increase annual outputs from restoration activities including the volume of commercial products and the acres of land treated over the next 10 years. The outputs listed in question #10 reflect that expectation. The total funds needed to attain those outputs exceed the SBRC proposal of \$4 million of CFLN funds and \$4 million in match funds. Through efforts from outside partners and the SBRC, there is at least some expectation we will exceed the \$4 million of match funds. We also believe with increased efficiency and leveraging of partnerships the cost per acre to complete these treatments will be reduced by 2017.

**12. Describe and provide narrative justification if planned FY 2016/17 accomplishments and/or funding differs from CFLRP project work plan** (no more than 1 page):

The Ouachita National Forest has no plans to deviate for planned accomplishments and/or funding levels as outlined in our CFLRP proposal and work plans. However, if funding is reduced either in grant or appropriated funds, the

accomplishments projected for FY16/17 will need to be adjusted. The most intense accomplishment is prescribed burning. This accomplishment is primarily weather dependent. If prescribed burning activities are not conducive due to weather conditions, then accomplishments may be increased in other areas to achieve restoration goals.

The majority of our improved roads and maintenance of high clearance roads has been accomplished through timber sale purchases during FY15. With roads funding being reduced over the last few years, these accomplishments continue to be funded through this source. However, with the cost of road maintenance and improvement greatly increasing over the past few years, the cost of maintaining and improving our roads associated with timber sales may be at a cost approaching or exceeding the cost of the sale. This has resulted in fewer dollars available for Knutson-Vandenburg Trust Fund (KV) work planned within the project. With this reduction in KV funds, we would need to look at other sources (appropriated funds) to accomplish our planned work. If appropriated funding is not available, the Forest may have to deviate from planned activities. Also, the high cost of road work within a timber sale could exceed the cost of the sale, resulting in the timber sale not being sold, which in turn would greatly affect our planned accomplishments.

**13. Please include an up to date list of the members of your collaborative** (name and affiliation, if there is one). If the information is available online, you can simply include the hyperlink here. If you have engaged new collaborative members this year, please provide a brief description of their engagement.

<b>Collaborative Members</b>	<b>Collaborative Members</b>
Backlund Logging	JC Oliver Inc.
Blue Mountains Biodiversity Project	Joseph's Juniper
Blue Mountain Forest Partners	Malheur Lumber
Boise Cascade	Malheur National Forest
Burns Paiute Tribe	The Nature Conservancy
Citizens for Public Access	North Fork John Day Watershed Council
DR Johnson Lumber	Oregon Dept. of Fish and Wildlife
Grant County Court	Oregon State University College of Forestry (OSU)
Harney County Court	Oregon Watershed Enhancement Board
Harney County High Desert Wheelers	Oregon Wild
Harney County Restoration Coalition	Rushcreek Ranch
Harney Co. Soil & Water Conservation District	Silvies Valley Ranch
High Desert Partnership	South Fork John Day Watershed Council
Grant County Forestry Commission	Sustainable Northwest
Grant Soil And Water Conservation District	University of Oregon Ecosystem Workforce Program
Grayback Forestry	USDA Forest Service Rocky Mountain Research Station
Iron Triangle	USDA Forest Service Area Ecology Program
USDA Forest Service Pacific Northwest Region Headquarters	USDA Forest Service Pacific Northwest Research Station Western Environmental Law Center

**14. How has your project increased support from partners in terms of in-kind contributions and funding?** (no more than one page):

In 2012-2013 years, the SBRC project has exceeded the 50% match requirements. In 2014 we were below 50%, but in 2015 we have again exceeded the match requirements. The most exciting accomplishment has been the shift from appropriated funds to service work, partnership and in-kind contributions, which we expect to continue into FY16 and beyond.

Fiscal Year	CFLN Funds/Carryover Funds(\$)	Appropriated Match(\$)	Partner In-Kind Contributions(\$)
2012	1,935,470	1,595,247	253,346
2013	2,044,272	3,924,552	229,400
2014	2,865,573.51	1,667,805.78	167,993
<b>2015</b>	<b>1,803,756.65</b>	<b>1,082,757.41</b>	<b>572,799.97</b>

This increase is in part due to a shift in focus for our forest partnership coordinator from the majority of their time working with the Collaboratives to seeking and fostering additional relationships. Our coordinator has also improved tracking of partnership dollars and in-kind contributions for increased reporting accuracy.

The forest has increased professional capacity since the inception of the SBRC project which further enabled staff to seek partnership contributions at project and district levels, which we also expect to continue. Further, as our Collaboratives have grown they have secured additional partnership contributions and leveraging opportunities.

The expansion of our project area in 2015 will also foster new partnerships. For example, the addition of the Middle Fork John Day River area will provide fertile ground for partnerships centered on aquatic restoration. Potential new partners include the Confederated Tribes of the Warm Springs Indian Reservation, North Fork John Day Watershed Council, Middle Fork John Day Intensively Monitored Watershed Working Group, The Nature Conservancy, The Fresh Water Trust, Oregon Watershed Enhancement Board, Oregon State University, University of Oregon, Oregon Department of Fish and Wildlife, National Marine Fisheries Service and US Fish and Wildlife Service.

**15. Media recap. Please share with us any hyperlinks to videos, newspaper articles, press releases, scholarly works, and photos of your project in the media that you have available.**

**Ecosystem Workforce Program, Institute for a Sustainable Environment, University of Oregon Fact Sheets:**

- Economic Impacts from Blue Mountains National Forests Restoration: Tracking Investments in Eastern Oregon: [http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS\\_4.pdf](http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS_4.pdf)
- Economic Impacts from the Malheur 10-Year Stewardship Contract: Evaluating Year One: [http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS\\_5.pdf](http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS_5.pdf)
- Eastern Oregon Restoration Benefits Businesses Statewide: Distribution of Timber Buyers and Service Contractors: [http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS\\_6.pdf](http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS_6.pdf)
- Collaborative Capacity for Accelerated Restoration: [http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS\\_7.pdf](http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS_7.pdf)


**Ecosystem Workforce Program, Institute for a Sustainable Environment, University of Oregon Working Papers:**

- Social and economic monitoring for the Southern Blues Restoration Coalition Project, Fiscal years 2012 and 2013. Ecosystem Workforce Program Working Paper #59. [http://ewp.uoregon.edu/sites/ewp2.uoregon.edu/files/WP\\_59\\_0.pdf](http://ewp.uoregon.edu/sites/ewp2.uoregon.edu/files/WP_59_0.pdf)
- Socioeconomic Monitoring Plan for the U.S. Forest Service's Eastside Restoration Efforts [http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP\\_52.pdf](http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP_52.pdf)
- The Impacts of the Woody Biomass Utilization Grant Program in Eastern Oregon and Eastern Arizona. [http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP\\_46.pdf](http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP_46.pdf)
- Sustainable Northwest: The CFLR Program celebrates its five-year anniversary, Posted by Renee Magyar on April 7, 2015. A 5-year report from the U.S. Forest Service was released today, highlighting results to date from this important program.
- <http://www.sustainablenorthwest.org/blog/posts/the-cflr-program-celebrates-its-five-year-anniversary>

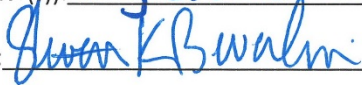
- Sustainable Northwest: 2015 Region 6 CFLRP Network Workshop, Posted by Patrick Shannon on April 1, 2015. *Adaptively Moving Forward. April 1-2, 2015 in Hood River, Oregon.*
- <http://www.sustainablenorthwest.org/blog/posts/2015-region-6-cflrp-network-workshop>.
- Southern Blues Restoration Coalition CFLRP: Blue Mountains Forest Partners &
- Harney County Restoration Collaborative. [http://www.sustainablenorthwest.org/uploads/general/Skelly\\_-\\_2015\\_Southern\\_Blues\\_Restoration\\_Coalition\\_CFLRP.pdf](http://www.sustainablenorthwest.org/uploads/general/Skelly_-_2015_Southern_Blues_Restoration_Coalition_CFLRP.pdf)
- Sustainable Northwest: What is a forest collaborative? Posted by Andrew Spaeth on February 18, 2015. *A brief overview of what forest collaboratives do, and the growth of these groups in Oregon.*  
<http://www.sustainablenorthwest.org/blog/posts/what-is-a-forest-collaborative>

**Signatures:**

Recommended by (Project Coordinator(s)):

Approved by (Forest Supervisor(s))<sup>17</sup>:



(OPTIONAL) Reviewed by (collaborative chair or representative): \_\_\_\_\_



# The Northern Goshawk on the Malheur National Forest

Blue Mountains Forest Partners invites you to come hear about an elusive, large forest raptor and the food web it depends upon



Photo: Rob Palmer © (used by permission)



**DATE:** Tuesday July 14

**TIME:** 1:00 to 3:30 PM

**LOCATION:** Grant County Regional Airport, John Day, Oregon

**Guest Speaker:** Avian biologist John Goodell (High Desert Museum) will be presenting with Trent Seager (OSU-BMFP)

**Topic:** The Northern Goshawk on the Southern Blue Mountains and Malheur National Forest

- overview of the goshawk
- connection to dry forest management
- survey and monitoring issues
- occupancy, prey, habitat, disturbance
- framework and recommendations for forest planning and restoration activities

**FFI contact BMFP:** Mark Webb at [bmfp06@gmail.com](mailto:bmfp06@gmail.com)

## Post-fire Science Discussion: Impacts and Implications for Management

June 16<sup>th</sup> & 17<sup>th</sup>, 2015

Mt. Vernon & John Day, Oregon



### Summary:

This workshop and field tour will review current science to help inform post-fire management decisions. The speakers will discuss impacts wildfires have on snag recruitment and persistence across the landscape, impacts to soil, what types of post-fire habitat are preferred by different species of woodpeckers, and what management actions might be suitable for enhancing forest health after wildfires. The workshop and field tour are open to the public and are free.

### Tuesday, June 16<sup>th</sup>

**Location:** Mount Vernon Community Center, 640 Ingle Street, Mount Vernon, OR

**1:00 – 2:00** Chris Dunn, Post-Doctoral Scholar, Oregon State University

**2:00 – 2:45** Ari Cowan, MS Candidate, Oregon State University

**2:45 – 3:00** Break

**3:00 – 4:00** Vicki Saab, Research Wildlife Biologist, Forest Service Rocky Mountain Research Station

**4:00 – 4:30** Discussion

### Wednesday, June 17<sup>th</sup>

Malheur National Forest Building, 431 Patterson Bridge Road, John Day, OR

**8:00 am – 3:00**, field tour to the South Fork Fire

Sponsored by:



[www.bluemountainsforestpartners.org](http://www.bluemountainsforestpartners.org)



[www.nwfirescience.org](http://www.nwfirescience.org)

**Speaker Biographies:**

**Chris Dunn**

Chris is a wildland fire researcher and educator at Oregon State University's College of Forestry. He came to OSU with a fire operations background, and has focused his research on the resilience of forest vegetation to fire, post-fire dead wood dynamics and the use of fire as a silvicultural tool. Starting in July he will work for the Missoula Fire Lab on expanding risk assessment and decision-making tools, as well as strategies to improve fire suppression effectiveness and cost mitigation.

**Ari Cowan**

Ari is a master's student in Forest Ecosystems & Society at Oregon State University, College of Forestry. She previously studied symbiotic fungi and forest biology at State University of New York College of Environmental Science & Forestry. Besides her recent work on the belowground impacts of fire, she is interested in disturbance ecology, dendrology, biological soil crusts, and the impact of invasive plants.

**Vicki Saab**

Vicki is a Research Wildlife Biologist with the Rocky Mountain Research Station of the Forest Service and currently works at the Bozeman Lab on the Montana State University campus. The focus of her work for the past 20 years has been evaluating the effects of large-scale disturbances, including fire, bark beetles, and land management activities on bird populations and identifying appropriate measures for bird conservation in dry mixed-conifer forests of the Inland West.

*For more information, contact Patrick Shannon at [pshannon@sustainablenorthwest.org](mailto:pshannon@sustainablenorthwest.org) or 503-221-6911x117.*