

Social and Economic Monitoring for the Southern Blues Restoration Coalition Project, Fiscal Years 2012 and 2013

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Collaboration on Forest Restoration and the Southern Blues Project

The Blue Mountains are located in northeastern Oregon and southeastern Washington. The Southern Blues comprise the southernmost portion of the range and extend from just south of John Day, Oregon, to just north of Burns, Oregon, in Grant and Harney counties. The majority of the area is part of the Malheur National Forest (MNF) and is managed by the USDA Forest Service (USFS). The forest is composed primarily of ponderosa pine and was historically dominated by frequent, low-intensity fires. Land management policies and climate changes over the last century, however, have led to many areas of forest with high stand densities that are prone to uncharacteristic stand replacing fires and insect outbreaks. The region has long been a focal point for discussion about dry-forest resource management issues, including the implementation of the “Eastside Screens” or the “21 inch rule” that restricted the harvesting of large-diameter timber on federal lands throughout eastern Oregon and the Blue Mountains. The combined effect of changing USFS policies, ecological conditions, and wood products markets has led to reductions in federal timber harvests, and closure of a number of timber

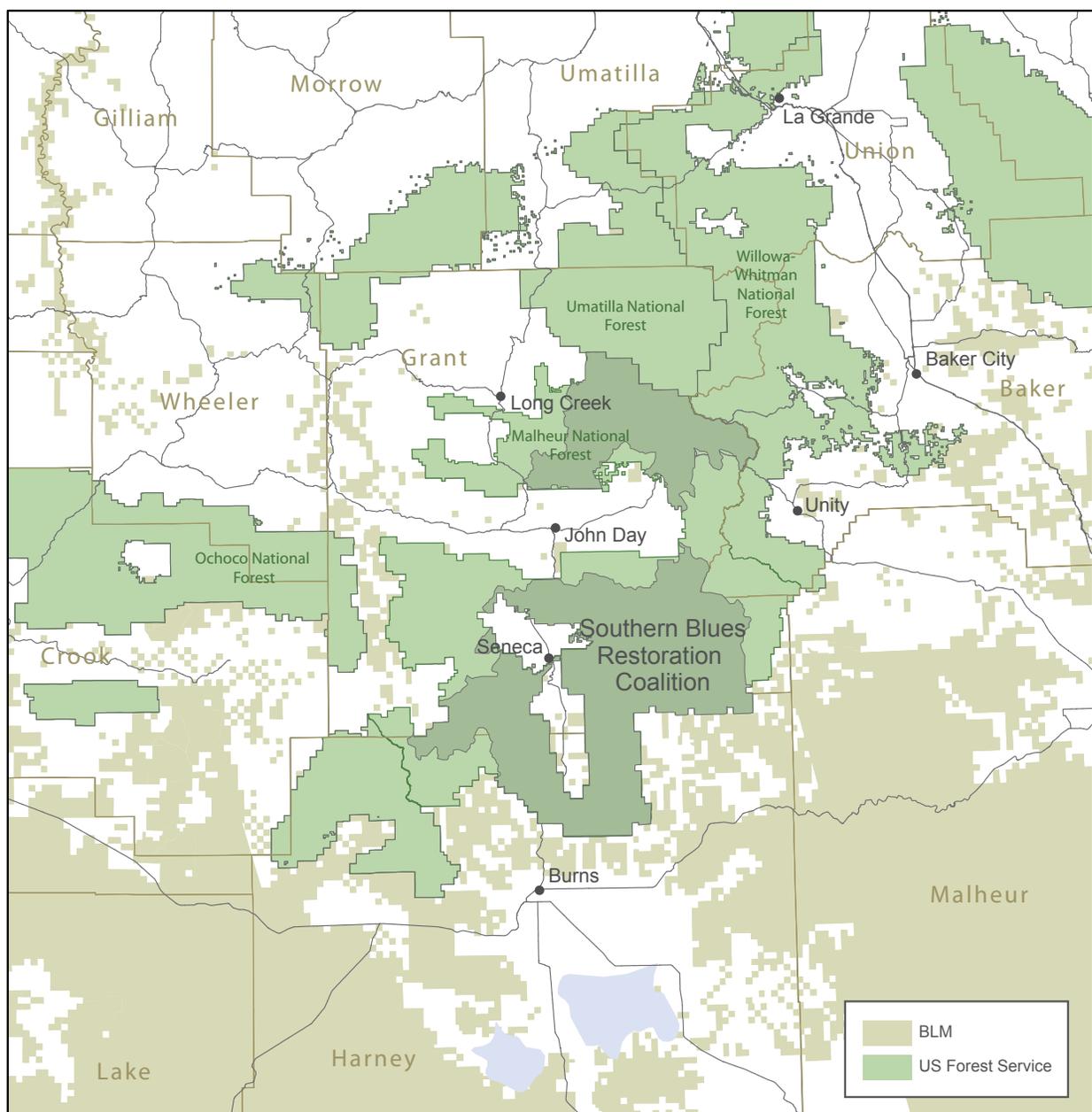
mills in John Day and Burns. Those changes have had a cascading effect on the social and economic conditions in many communities in Grant and Harney counties.

In the wake of changing ecological and social conditions, a diverse group of community leaders, loggers, ranchers, conservationists, and USFS representatives began to come together to explore options to address many of the challenges facing the MNF and adjacent communities. In Grant County, in the northern portion of the Southern Blues area, a number of stakeholders formalized this new focus on working toward a common vision for restoration by establishing Blue Mountains Forest Partners (BMFP) in 2006. Farther to the South, stakeholders came together to form the Harney County Restoration Collaborative (HCRC) in 2008. Since formation, the two groups have worked both independently and together to come to areas of agreement for active management of the MNF to achieve ecological objectives for forests and desired social and economic outcomes in rural communities.

The Collaborative Forest Landscape Restoration (CFLR) Program, administered by the USFS, supports “science-based ecosystem restoration of forested landscapes”, and also seeks to encourage economic and social sustainability, leverage local resources with national and private resources, and benefit local rural economies through the utilization of forest restoration by products.¹ Projects se-

lected for participation in the CFLR Program receive significant funding over a period of up to 10 years to implement restoration activities on national forest lands. In 2011, the MNF and the Southern Blues Restoration Coalition (SBRC) applied to the CFLR Program for the Southern Blues Project (see Figure 1, below).

Figure 1 Southern Blues Project area



The main objectives of the Southern Blues Project were to restore both terrestrial and aquatic ecosystems with greater ecological resistance to disturbance from fire, insects, and disease while also creating a consistent and predictable workflow for forest contractors that benefits local communities.² The overall scope of the project is envisioned to treat 271,980 acres by 2019. The Southern Blues Project was selected as one of several new CFLR Projects in the 2012 CFLR Program award cycle.

Project monitoring is an integral part of the CFLR Program. Local USFS personnel complete annual standardized achievement reports.³ In addition, collaborative groups associated with CFLR projects are directed to develop their own multiparty biophysical and socioeconomic monitoring. Multiparty monitoring is a collaborative process whereby stakeholders share in the development of questions, methods, and often data collection, and actively use results to adapt management and build trust.

A subset of members of SBRC and USFS personnel formed a team to develop a multiparty monitoring plan for the Southern Blues Project. The monitoring team formed subcommittees covering five topics: fire regime restoration, fish and wildlife habitat condition, watershed condition, invasive species, and socioeconomics. Each subcommittee completed an iterative process with the full committee to identify and prioritize monitoring questions that address local interests and the goals and objectives of the Southern Blues Project. University and USFS scientists were included to help identify monitoring questions. The final monitoring plan addressed 10 questions.⁴ The SBRC has partnered with Uni-

versity and USFS scientists, USFS managers, and non-governmental organizations to implement the monitoring plan and write monitoring reports. The Ecosystem Workforce Program at University of Oregon was contracted to complete and report on the three social and economic monitoring questions for the 2012 and 2013 CFLR years (see Table 1, below).

Methods

Monitoring the investments of the Southern Blues Project allows for an assessment of the outcomes of the project and to identify opportunities to change implementation approaches to improve those outcomes. This multiparty monitoring report attempts to assess how Southern Blues activities are influencing social and economic conditions in Grant and Harney counties. We focus on understanding the local socioeconomic context, describing the ability of the local workforce to capture CFLR restoration work, and measuring the social and economic outcomes from CFLR implementation in the local area.

Data sources and analysis

We used a variety of data and approaches in this analysis. State and federal data were used to describe local social and economic conditions and determine average wages in the study area. Federal records on service contracts (Federal Procurement Data System, FPDS) and Forest Service timber sales (Timber Information Management System, TIMS) were used to quantify the values of USFS restoration service contracts and timber sales awarded

Table 1 Social and economic monitoring questions and indicators for the Southern Blues Project multiparty monitoring plan

| Monitoring questions | Indicators |
|---|--|
| How much and what kinds of CFLR restoration work are captured locally? | Number of CFLR contracts awarded to local contractors; types of contracts issued for CFLR work. |
| How does timber harvest from CFLR forest restoration affect local industry? | Purchases by local businesses of timber sold from CFLR work; species and types of timber sold from CFLR work. |
| What are the economic impacts in the local area from CFLR work? | Number of local jobs supported by service contracts and timber sales; income to local workers from service contracts and timber sales. |

to businesses as well as patterns in contracts and timber sales over time. Restoration work includes activities such as tree thinning using machines or hand crews, piling of cut small diameter material, tree planting, invasive weed control, biological assessments, replacement of culverts, road repair, and other work in support of watershed restoration and was identified in FPDS using a standard set of Product Service Codes (PSC).⁵ Projects implemented using stewardship authorities are recorded in either TIMS or FPDS, or both, depending on the type of stewardship mechanism used and project components. We used information from the Forest Activity Tracking System (FACTS) to identify timber sales in fiscal years 2012 and 2013 that were associated with the Southern Blues Project. We used the economic model IMPLAN⁶ and a customized approach to explore how the economy of Grant and Harney counties is influenced by implementation of CFLR work. For the purpose of this study, we assumed contractors whose businesses were located in Grant or Harney counties were local contractors.

Baseline assessment

This analysis focuses on CFLR work during fiscal years 2012 and 2013. To place the conditions in 2012 and 2013 in context, we compared the condi-

tions of indicators during the CFLR years to those during a baseline period immediately prior to the beginning of the Southern Blues project (FYs 2007–2011). We used a baseline to help assess whether the conditions during the first two years of CFLR work differed from previous conditions.

We used FPDS data to identify contracts with private businesses for USFS restoration work on the MNF during the baseline period. We characterized the work type of the contracts using the PSC for the work being performed and the description of the work, as recorded in the contract record. The information on the vendor address was used to identify whether the business was from Grant or Harney County.

Because of data constraints, the baseline period for timber sales differs slightly from that used for service contracting. We gathered data on the advertised sale volumes for all timber sales from the MNF for the period 2009 to 2011. We classified timber purchasers as local if the business was located in either Grant or Harney County. We used data from advertised timber sale volumes to estimate the economic activity from past timber sales from the MNF.



Background: Social and economic context of Grant and Harney counties

To provide context for monitoring the Southern Blues Project, we examined the social and economic conditions in Grant and Harney counties and compared them to statewide conditions. We examined social and economic indicators such as median income, unemployment rate, school dropout rate, and percentage of the population in poverty, which reflect the broader conditions of these rural counties. We note that while the Southern Blues Project may have some effects in the counties, it is unlikely that the project alone will be able to influence broad-scale social and economic conditions in the counties. Therefore, we present these data as background for better understanding the context in which the Southern Blues Project is being implemented.

The populations of Grant and Harney counties differ from statewide averages in several ways (see Table 2, below). Both counties have older populations, higher unemployment, and greater rates of poverty than statewide averages. Dropout rates in Grant and Harney schools are lower than the statewide average. Enrollment in Grant County schools

was the same between the 2012/2013 to 2013/2014 academic years while Harney County school enrollment dropped by 1.1 percent. Statewide, school enrollment increased by 0.6 percent during the same time period. The share of students eligible for free and reduced lunch is currently greater (2013/2014 school year) in both counties than the statewide average. Average household incomes in Grant and Harney counties were more than \$10,000 less than the statewide average. The number of families receiving SNAP benefits in Grant County in 2013 was 663 while in Harney County it was 817.

State and federal government and retail trade account for the majority of employment in Grant and Harney counties (see Table 3, page 8). Those employment patterns are generally consistent with patterns of employment found in other rural counties in Oregon. However, relative to statewide patterns, Grant and Harney counties have greater reliance on employment in government and animal and crop production and less reliance on employment in financial and professional services than the state as a whole.

Table 2 Key social and economic characteristics in Grant and Harney counties and statewide

(Sources: Oregon Department of Human Services, Oregon Department of Education, and Oregon Rural Explorer)

| Characteristics | Grant County | Harney County | Oregon |
|--|--------------|---------------|----------|
| Median age (2007-2011) | 49.3 | 45.9 | 38.2 |
| School enrollment (change from previous year (2012/2013 to 2013/2014)) | 0.0% | -1.1% | 0.6% |
| Dropout rate (2012/2013) | 3.7% | 2.7% | 4.0% |
| Percent of students eligible for free and reduced lunch (2013/2014) | 57.7% | 59.6% | 53.7% |
| Median household income (August 2014) | \$35,051 | \$38,113 | \$49,850 |
| Unemployment rate (August 2014) | 11.2% | 10.5% | 7.2% |
| Percent of population in poverty (2007-2011) | 15.8% | 20.5% | 14.8% |
| Families receiving SNAP benefits (2013) | 663 | 817 | 443,618 |

Table 3 Top employment sectors in Grant and Harney County, 2014*(Source: State of Oregon Employment Department)*

| Economic Sector | Grant County | | Harney County | | Percent of employment in Oregon |
|-------------------------------------|-------------------|------------------------------|-------------------|------------------------------|---------------------------------|
| | Sector employment | Percent of county employment | Sector employment | Percent of county employment | |
| State and local government | 698 | 29% | 750 | 34% | 14% |
| Federal government | 279 | 12% | 239 | 11% | 2% |
| Retail trade | 228 | 10% | 276 | 12% | 11% |
| Financial and professional services | 198 | 8% | 131 | 6% | 17% |
| Leisure and hospitality | 182 | 7% | 226 | 10% | 10% |
| Animal production | 73 | 3% | 96 | 4% | <1% |
| Crop production | <161* | <7% | 69 | 3% | 2% |
| Forestry and logging | <161* | <7% | 6 | <1% | 1% |
| Wood product manufacturing | <141* | <6% | 0 | 0% | 1% |

* Because the number of companies is limited, the State of Oregon does not release specific employment figures for some sectors.



Southern Blues Project impacts, FY 2012-2013

How much and what kinds of CFLR restoration work are captured locally?

In the first two years of the Southern Blues Project, the MNF established 24 contracts for CFLR work worth \$1.74 million. Although funds were received late in fiscal year 2012, service contract spending was split nearly equally between fiscal years 2012 and 2013. The majority of the service contracts were for labor- and equipment-intensive work, such as pre-commercial hand and mechanical thinning, hand and mechanical piling, and mechanical treatment of surface fuels. Because the description of work performed for the CFLR contracts was limited, we had to classify contracts into work type based solely on the PSC. In some cases, we may have classified a contract as labor-intensive work when it was really equipment-intensive work.

Twenty of the 24 contracts for CFLR work were awarded to contractors located in Grant and Harney counties (see Table 4, below). Those local contractors captured 68 percent of the value of CFLR service contracts. Local capture of contract value was

greater in 2013 (84 percent) than in 2012 (52 percent). Local contractors captured 88 percent of the value of contracts for labor intensive work. In most eastern Oregon counties, local contractors typically capture very small shares of labor intensive work.^{7,8} The local capture of labor-intensive projects for the Southern Blues Project can largely be attributed to the presence of Grayback Forestry in Grant County. Unfortunately, we can discern little information about the specific activities performed for each contract because very limited work descriptions were included in the contract records.

Ten local companies located in Grant and Harney counties received contracts to do CFLR work. Slightly more than 50 percent of the value of local contracts went to a single local contractor. Excluding that one contractor, on average, all remaining local businesses had contracts for CFLR work worth about \$64,000, on average. However, the total value of contracts to local businesses was highly variable, ranging from contracts worth several thousand dollars to contracts worth several hundred thousand dollars.

Table 4 Local capture and worktype for service contracts with CFLR funds, fiscal years 2012 and 2013 (Source: Federal Procurement Data System records)

| Worktype | Total contracts | Contracts with local contractors | Total contract value | Contract value with local contractors | Local capture of value |
|--------------|-----------------|----------------------------------|----------------------|---------------------------------------|------------------------|
| Equipment | 3 | 2 | \$527,180 | \$122,016 | 23% |
| Labor | 20 | 18 | \$1,195,429 | \$1,055,378 | 88% |
| Material | 1 | 0 | \$16,366 | \$0 | 0% |
| Professional | 0 | 0 | \$0 | \$0 | n/a |
| Technical | 0 | 0 | \$0 | \$0 | n/a |
| Grand total | 24 | 20 | \$1,738,975 | \$1,177,394 | 68% |

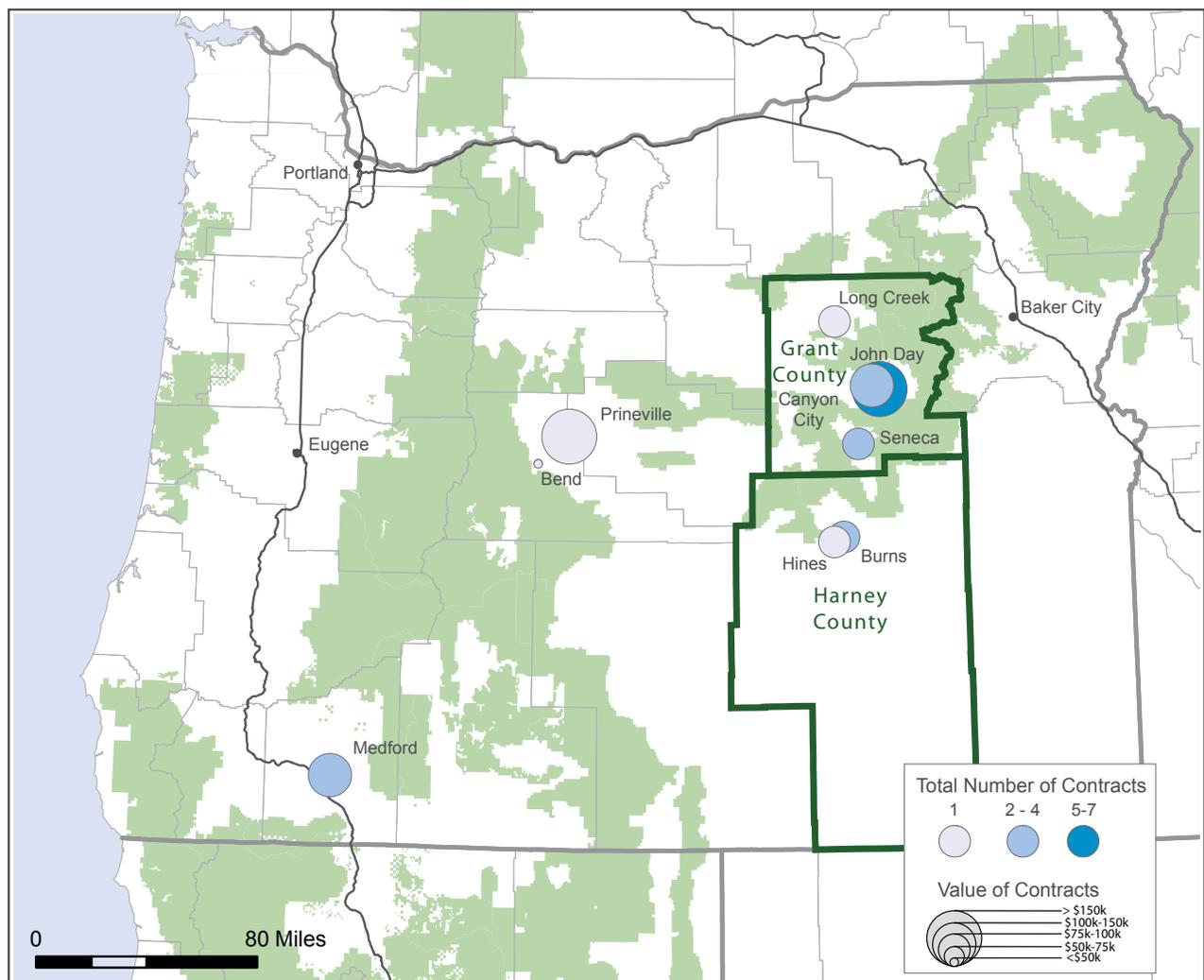
Eight of the 10 local contractors who had CFLR contracts were based in Grant County; two were from Harney County (see Figure 2, below). The Grant County contractors were located most often in John Day and Prairie City. The Harney County contractors were located in Burns and Hines. The non-local contractors doing CFLR work were based in Crook, Deschutes, and Jackson counties. Two of the three non-local contractors had previously done restoration work on the MNF.

CFLR comparison to the 2007–2011 baseline

Between 2007 and 2011, prior to the CFLR award, the MNF spent a total of about \$33.7 million on service contracts with local and non-local businesses for restoration activities on the national forest (see see Figure 3, page 12). More than \$20 million of that spending happened in 2010 because of funding associated with the American Recovery and Reinvestment Act (ARRA). Excluding year 2010, on average, the MNF spent \$3.2 million per year on contracts

Figure 2 Origin of businesses with contracts for work related to the Southern Blues Project on the Malheur National Forest, fiscal years 2012 and 2013

(Source: Federal Procurement Data System records)



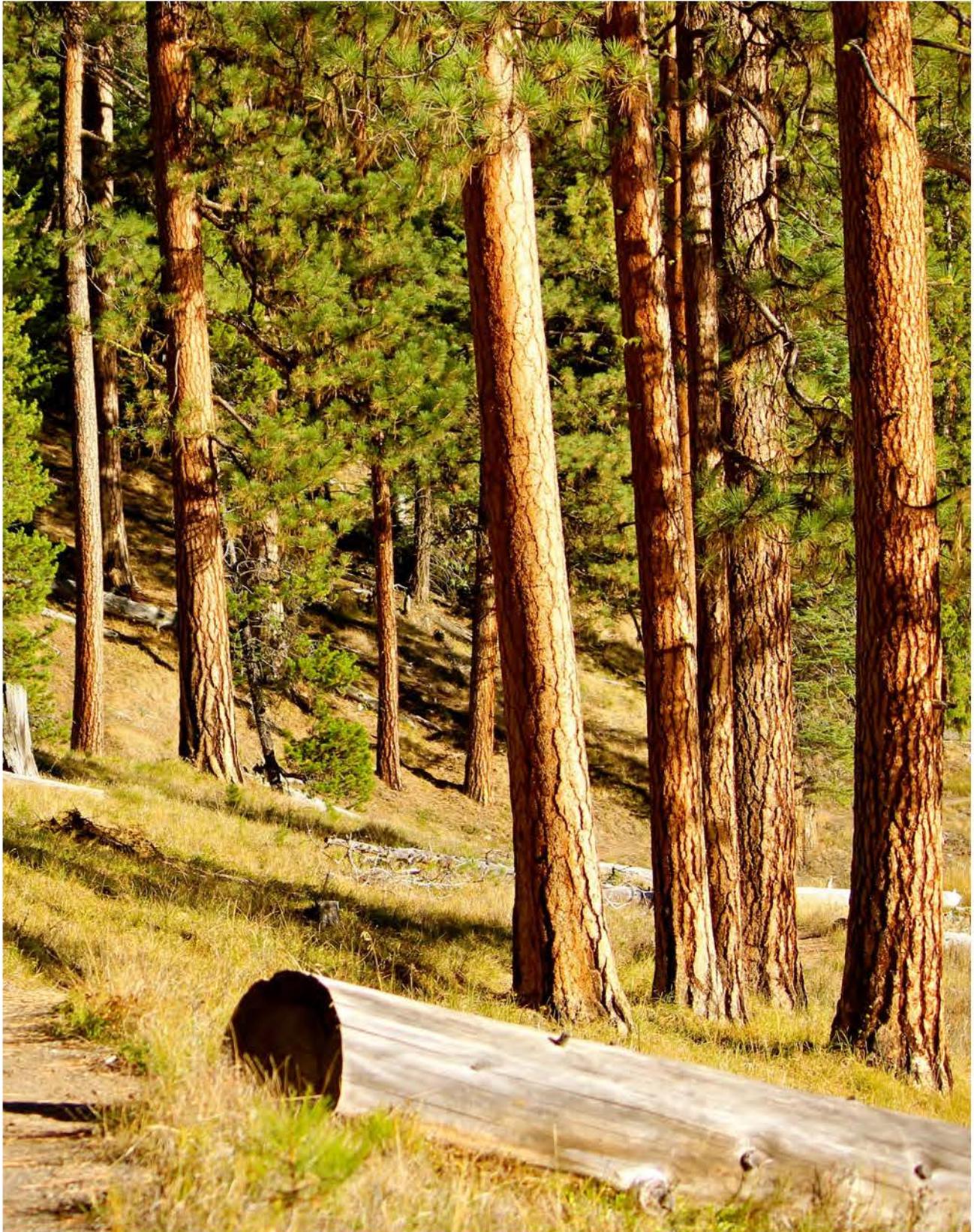
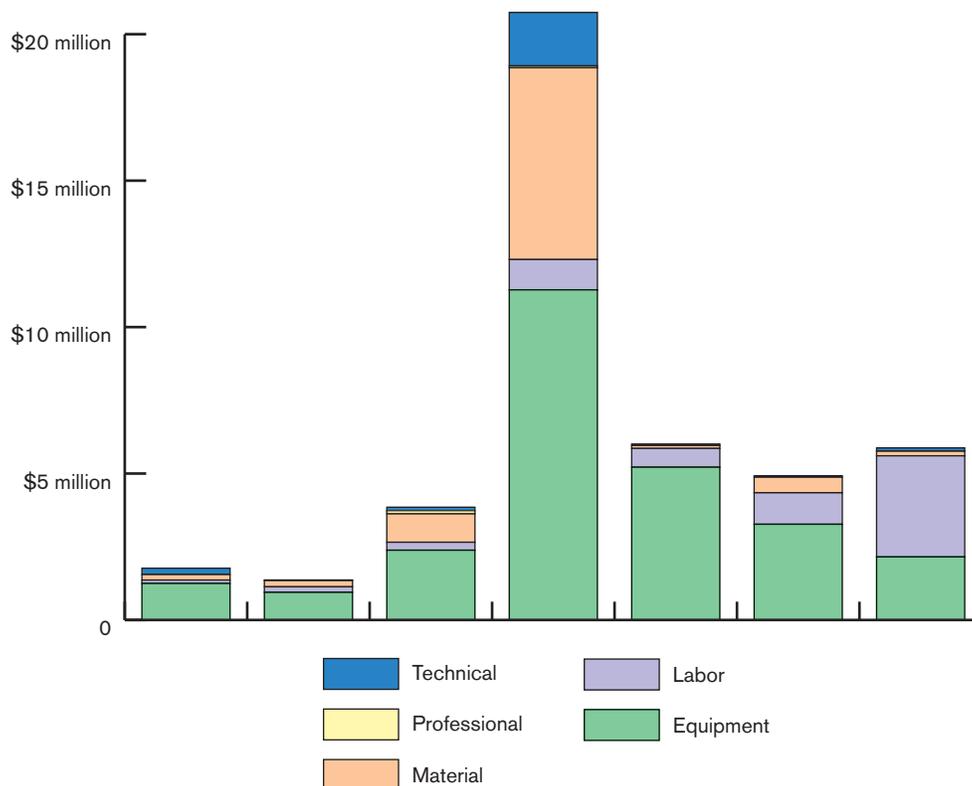


Figure 3 Restoration contracts by worktype on the Malheur National Forest for the five-year period, 2007–2011 (Source: Federal Procurement Data System records)



for restoration work. Equipment-intensive work, such as mechanical thinning of pre-commercial timber and mechanical removal of surface fuels, accounted for the majority (62 percent) of contract expenditures.

About half of the \$33.7 million spent on service contracts between 2007 and 2011 was awarded to local businesses (see Table 5, page 13). Across all worktypes, local contractors captured about 25 percent of service contracts. Local contractors were very successful at capturing equipment-intensive work, securing the majority of contracts for that work and 66 percent of contracted funds. The pattern of high local capture for equipment-intensive work is typical for other eastern Oregon national forests. Contracts for professional work (e.g., computer studies, engineering design) and technical work (e.g., stand surveys, invasive weed spraying, cultural surveys)

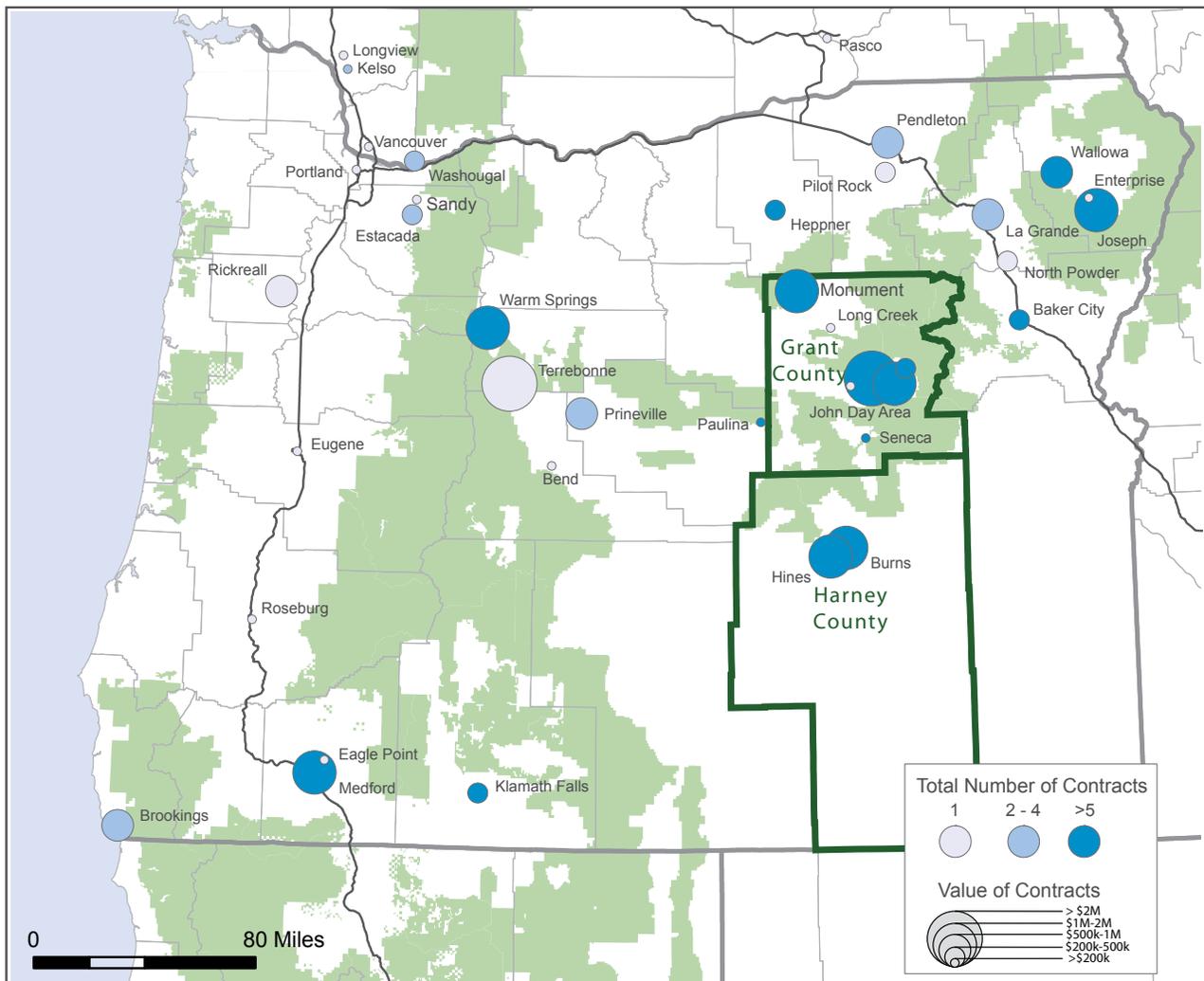
were awarded almost exclusively to non-local contractors. Non-local contractors also captured most of the contract value for labor-intensive (e.g., hand thinning, hand piling) and material-intensive (e.g., road work, culvert work) work. It is fairly common in eastern Oregon that contracts for labor-intensive work on national forests are awarded to contractors from outside the local area.

The local businesses awarded contracts for restoration work between 2007 and 2011 were located primarily in John Day and Prairie City. Non-local businesses were located in places such as Wallowa, Deschutes, and Jackson counties (see Figure 4, page 13). Those non-local cities are home to a number of contractors that do labor-intensive restoration work for national forests throughout Oregon, California, and Washington.

Table 5 Baseline contracting for restoration work on the Malheur National Forest, 2007–2011
 (Source: Federal Procurement Data System records)

| Worktype | Total contracts | Contracts with local contractors | Total contract value | Contract value with local contractors | Local capture of value |
|--------------|-----------------|----------------------------------|----------------------|---------------------------------------|------------------------|
| Equipment | 260 | 151 | \$21,063,986 | \$13,812,028 | 66% |
| Labor | 135 | 95 | \$2,251,242 | \$762,015 | 34% |
| Material | 32 | 10 | \$8,015,398 | \$2,564,013 | 32% |
| Professional | 52 | 36 | \$174,280 | \$0 | 0% |
| Technical | 2 | 0 | \$2,234,500 | \$173,650 | 8% |
| Grand total | 39 | 10 | \$33,739,406 | \$17,311,705 | 51% |

Figure 4 Origin of businesses with contracts for restoration work on the Malheur National Forest, 2007–2011
 (Source: Federal Procurement Data System records)



The contracts for CFLR work were more frequently labor-intensive activities, compared to the pattern for restoration work in the baseline years. However, because the descriptions of the work performed in the CFLR service contracts were very limited, we may have classified (based on PSC) some contracts that were really equipment-intensive work as labor-intensive work. Regardless, across all worktypes, contractors in Grant and Harney counties captured a larger share of both contracts and contract value for CFLR work than in the baseline contracting years. In particular, Grant and Harney county contractors were able to capture a much larger share of labor-intensive work than in the baseline years. Local contractors captured a smaller share of contracts and contract value for equipment-intensive work than in the baseline years (however, only a few CFLR contracts were classified as equipment-intensive work). For both the CFLR work and the baseline restoration work, the majority of local contractors were located in John Day and Prairie City.

How does timber harvest from CFLR forest restoration affect local industry?

Local purchase of timber sales from CFLR work

In fiscal years 2012 and 2013, there were 7 timber sales related to CFLR work, as identified from the FACTS database, that were purchased by 4 businesses. This includes the first timber sale of the Malheur 10-year stewardship contract completed at the very end of fiscal year 2013. Two timber purchasing businesses were from the local area and two were from outside the local area. The two non-local timber purchasers were located in western and central Oregon.

The two local companies purchased 5 of the 7 CFLR-related timber sales. Those sales accounted for 86 percent of the volume of CFLR-related timber sales (see Table 6, page 15). Of the volume purchased by local buyers, a little more than 70 percent

was ponderosa pine sawtimber.⁹ Local businesses purchased about 89 percent of the non-sawtimber volume sold. Non-local purchasers bought about 11 percent of all the ponderosa pine sawtimber volume sold as part of CFLR projects.

The first sale of the Malheur 10-year stewardship contract contained about 35 million board feet of timber, much of it advertised as sawtimber. That timber sale occurred at the end of fiscal year 2013 and may be better considered in analysis of FY 2014 CFLR activities. Excluding the volume associated with that large timber sale, local businesses purchased about 57 percent of the timber volume sold in association with CFLR projects (see Table 7, page 15). The share of total volume purchased by a local business is less when excluding the 10-year stewardship sale because that high volume sale was purchased by a local business. Excluding the stewardship sale, local businesses purchased about 2/3 of the non-sawtimber sold as part of CFLR projects and about 54 percent of CFLR-associated sawtimber sales.

The value of timber sold in fiscal years 2012 and 2013 associated with CFLR projects exceeded \$2.1 million (see Table 8, page 15). This value includes the first sale of the Malheur 10-year stewardship contract, where a portion of the timber value was offset by restoration work. Local businesses purchased about 85 percent of the value of timber sold from activities related to the CFLR project.

The first task order of the 10-year stewardship contract more than tripled the value of timber sold in association with the Southern Blues Project in fiscal years 2012 and 2013. Without the 10-year stewardship contract, the value of timber sold in the first two years of the Southern Blues project was \$630,000 (see Table 9, page 15). Local businesses in Grant and Harney counties were able to purchase 63 percent of that non-stewardship contract timber value.

Table 6 Volume (1,000s of board feet) of timber sold as part of CFLR projects on the Malheur National Forest, fiscal years 2012 and 2013 (Source: Forest Service Timber Information Management System)

| Product/species | Percent local | Grant/Harney county | Not local |
|-------------------|---------------|---------------------|-----------|
| Non-sawtimber | | | |
| Softwood | 89% | 11,759 | 1,440 |
| Sawtimber | 85% | 35,766 | 6,306 |
| Douglas-fir | 50% | 1,478 | 1,497 |
| Ponderosa pine | 89% | 33,955 | 4,195 |
| White fir & other | 35% | 333 | 614 |
| Total Volume | 86% | 47,525 | 7,745 |

Table 7 Volume (1,000s of board feet) of timber sold as part of CFLR projects on the Malheur National Forest, fiscal years 2012 and 2013 (excluding the Malheur 10-year stewardship contract) (Source: Forest Service Timber Information Management System)

| Product/species | Percent local | Grant/Harney county | Not local |
|-------------------|---------------|---------------------|-----------|
| Non-sawtimber | | | |
| Softwood | 65% | 2,640 | 1,440 |
| Sawtimber | 54% | 7,432 | 6,306 |
| Douglas-fir | 31% | 686 | 1,497 |
| Ponderosa pine | 62% | 6,722 | 4,195 |
| White fir & other | 4% | 24 | 614 |
| Total Volume | 57% | 10,072 | 7,745 |

Table 8 Value of timber sold from projects associated with CFLR efforts on the Malheur National Forest, fiscal years 2012 and 2013 (Source: Forest Service Timber Information Management System)

| | Percent local | Grant/Harney county | Not local |
|---------------|---------------|---------------------|-----------|
| Non-sawtimber | 99% | \$80,235 | \$692 |
| Sawtimber | 85% | \$2,096,278 | \$375,901 |
| Total | 85% | \$2,176,513 | \$376,593 |

Table 9 Value of timber sold from projects associated with CFLR efforts on the Malheur National Forest, fiscal years 2012 and 2013 (excluding the Malheur 10-year stewardship contract) (Source: Forest Service Timber Information Management System)

| | Percent local | Grant/Harney county | Not local |
|---------------|---------------|---------------------|-----------|
| Non-sawtimber | 99% | \$75,284 | \$692 |
| Sawtimber | 60% | \$554,663 | \$375,901 |
| Total | 63% | \$629,948 | \$376,593 |

CFLR comparison to the 2009–2011 baseline

Between fiscal years 2009 and 2011, the MNF sold about 37 million board feet of timber annually across the entire national forest. There was relatively little year to year variation in timber sale volume during this period, although year 2010 had the greatest volume sold. During this baseline period, purchasers located in Grant and Harney counties bought 50 percent of all the timber volume (see Table 10, below). However, the share of sold volume purchased by local businesses varied markedly from year to year.

About 69 percent of the volume sold by the MNF during the baseline period was advertised as sawtimber. Local businesses were able to purchase 61 percent of that advertised sawtimber volume, for the whole period. However, the share of sawtimber purchased by local businesses in any single year was highly variable, from 36 percent to 100 percent. Local businesses purchased about 25 percent of the advertised non-sawtimber volume sold during the period.

The value of timber sold between 2009 and 2011 was about \$5.3 million. Although local businesses

bought about half of all timber volume, they secured 19 percent (\$1.0 million) of the timber value sold during the period. The majority of timber value accrued to businesses outside Grant and Harney counties, especially in a few timber sales to Boise Cascade. The value of the three timber sales to Boise Cascade was more than \$3.9 million.

When not including the 10-year stewardship contract, local businesses purchased a greater share (57 percent) of the all volume sold as part of CFLR work but a lower share of the sawtimber sold (54 percent), relative to patterns in the years prior to the Southern Blues Project. This means that although businesses in Grant and Harney counties were buying more of the volume sold as part of CFLR work, that CFLR volume included a large amount of non-sawtimber material. Because the 10-year stewardship contract sale had a large amount of volume advertised as sawtimber, when that sale is also included, local businesses have been able to purchase much larger shares of both total timber volume and sawtimber volume, than in the three years prior to CFLR.¹⁰

Table 10 Percent of timber volume sold by the Malheur National Forest purchased by businesses in Grant and Harney counties, 2009–2011 (Source: Forest Service Timber Information Management System)

| Product | 2009 | 2010 | 2011 | 2009–2011 Period |
|---------------|------|------|------|------------------|
| Sawtimber | 100% | 36% | 60% | 61% |
| Non-sawtimber | 7% | 32% | 37% | 25% |
| Total | 67% | 35% | 53% | 50% |





What are the economic impacts in the local area from CFLR work?

We used the economic model IMPLAN and information in USFS databases to estimate the economic impact in Grant and Harney counties resulting from Southern Blues Project restoration work in fiscal years 2012 and 2013. We identified the values and worktypes (e.g., equipment intensive, labor intensive, etc.) of contracts for restoration work that used CFLR funds based on FPDS records and information from MNF personnel. For each worktype, we estimated how much the business had to spend on salaries for workers, on supplies like fuel, hand tools, tires, metal, wood, and on services like accounting, contract review, and banking to do the work. We input those business expenditures into an economic model developed in IMPLAN specifically for the economy of Grant and Harney counties. We also gathered advertised timber sales volumes

by coarse log size for timber sales associated with CFLR projects in fiscal years 2012 and 2013. For this analysis, we have not included the 10-year stewardship contract sale because timber harvesting and processing for that sale first occurred in fiscal year 2014. To estimate the economic activity from timber harvesting and mill processing, we combined the advertised sale volumes and assumptions about the amount of material processed locally¹¹ with existing USFS protocols for analysis of economic impact of forest management and IMPLAN model data for the local area. Output from the economic model for both service contracting and timber sales included estimates of the number of jobs and income supported by CFLR project activity. The analysis includes economic activity associated with both the business doing the work as well as all the multiplier activity as other sectors of the local economy are affected by CFLR work.

Local jobs supported from service contracts and timber sales

Service contracts and timber sales in fiscal years 2012 and 2013 for CFLR work have supported 38 jobs each year in Grant and Harney counties (for a total of 76 one-year jobs for fiscal years 2012 and 2013) (see Figure 5, page 19). Those jobs include both full and part-time positions and represent a year's worth of work. Because forestry work is often seasonal, it is likely that at some points during the year more than 38 people were working; during other times of the year, likely fewer people were working. Twenty-two of the jobs supported by CFLR work were in the woods doing treatments, or in timber mills processing material harvested as part of CFLR work. The remaining 16 jobs were in businesses selling goods and services to the companies (and their employees) doing the CFLR work or processing CFLR timber. For every 1 job supported directly doing CFLR work or in the mill, another $\frac{3}{4}$ of a job was supported in the local economy.

The reported jobs include only those associated with CFLR work performed by the private sector. In addition to private sector employment, the MNF hired additional employees in fiscal years 2012 and

2013 to plan, implement, and monitor CFLR project activities. Many of those USFS employees moved to Grant County from outside the local area. Additionally, the MNF also accomplished some CFLR work through grants and agreements with outside entities. Employment associated with those activities is in addition to what is reported here.

Local income supported from service contracts and timber sales

Collectively, employees directly engaged in completing CFLR treatments or processing timber harvested in the course of CFLR work earned nearly \$1 million per year in fiscal years 2012 and 2013 (see Figure 6, page 19). Those doing CFLR work involving harvesting of timber accounted for a bit more than half of that annual income (as estimated from average wage rates for the local area). Collectively, employees in sectors of the economy experiencing the secondary effects of CFLR work earned about \$511,000 per year in 2012 and 2013. Because the employees in those secondary sectors are often in service and retail sectors, the average annual income accruing to those employees is less than those employed to do the CFLR work.



Figure 5 Average annual jobs supported from CFLR projects, fiscal years 2012 and 2013

(Note: Excludes the timber sale associated with the Malheur 10-year stewardship contract issued at the end of fiscal year 2013)

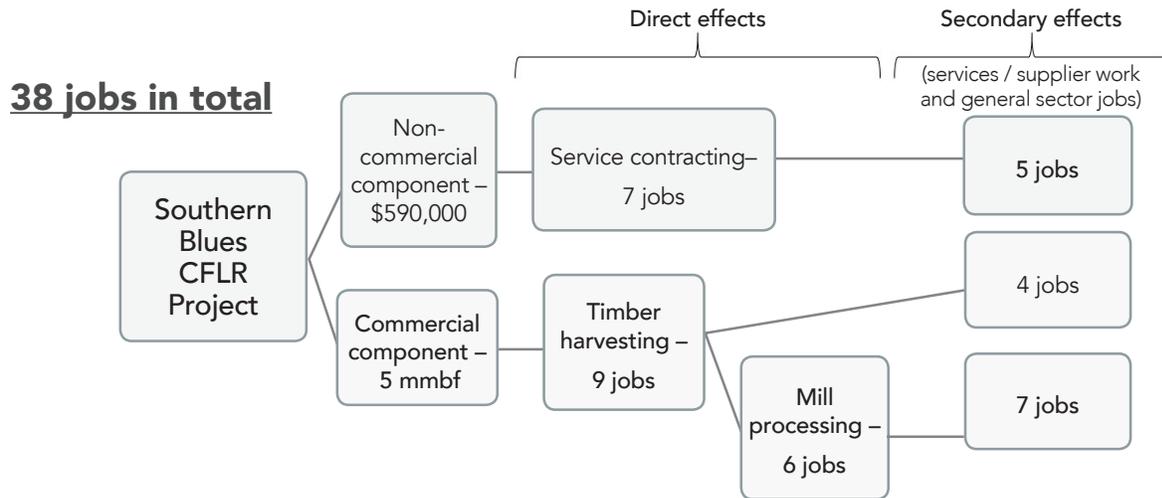
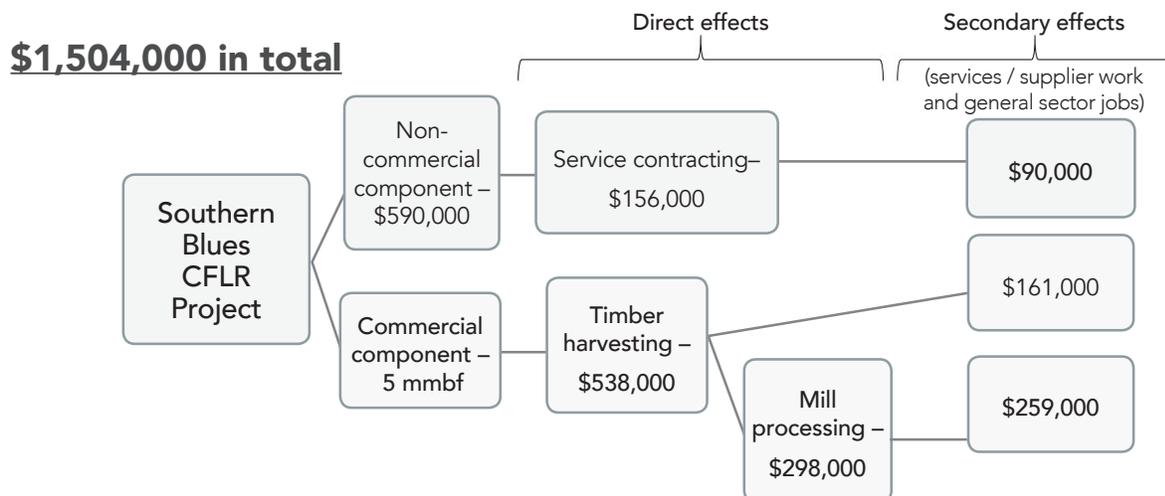


Figure 6 Average annual income supported from CFLR projects, fiscal years 2012 and 2013

(Note: Excludes the timber sale associated with the Malheur 10-year stewardship contract issued at the end of fiscal year 2013)



CFLR comparison to the 2009–2011 baseline

In the years preceding the start of the Southern Blues Project, restoration-related activities on the entire MNF supported about 129 full and part-time jobs per year in Grant and Harney counties (see Figure 7, page 21). Those jobs include only activity (service contracts, timber sales, and mill processing) between the MNF and businesses in Grant and Harney counties. Because the baseline comparison relates to restoration activities on the entire MNF, the number of jobs supported in the baseline is significantly larger than that supported solely by CFLR work that was on just a portion of the forest. However, the number of local jobs supported annually by CFLR work in 2012 and 2013 (38) represents nearly 1/3 of the local jobs that were supported by MNF restoration activities in the baseline years (129).

Relative to the baseline, a larger share of the jobs supported by the Southern Blues Project in years 2012 and 2013 were tied to the service contract portion of restoration projects. That is, of the direct effects jobs, a greater share came about from work associated with service contracts. This is likely because, relative to the baseline, service con-

tracting for CFLR work more frequently involved labor-intensive work (see page 14). In the baseline period, jobs supported by service contracts were nearly equally divided between direct jobs doing the work (67) and the secondary jobs among suppliers and service providers (62). For CFLR work, about 58 percent of jobs supported were direct jobs in the woods doing the CFLR work or processing harvested timber.

During the baseline years, restoration activities across the entire MNF completed by local businesses supported about \$5.7 million in income per year in Grant and Harney counties (see Figure 8, page 21). On average, during the baseline, employees engaged directly in doing the work in the woods or processing harvested timber earned about \$53,500 per year. Those engaged as suppliers or providing services to businesses and suppliers earned about \$32,500 per year, on average. Relative to the baseline, more of the total share of income supported by CFLR work was associated with those directly doing the project work rather than those supported by the secondary effects. That is likely because the worktype during the CFLR years relied more on labor-intensive work.



Figure 7 Average annual jobs supported from restoration projects during the baseline comparison years, 2009-2011

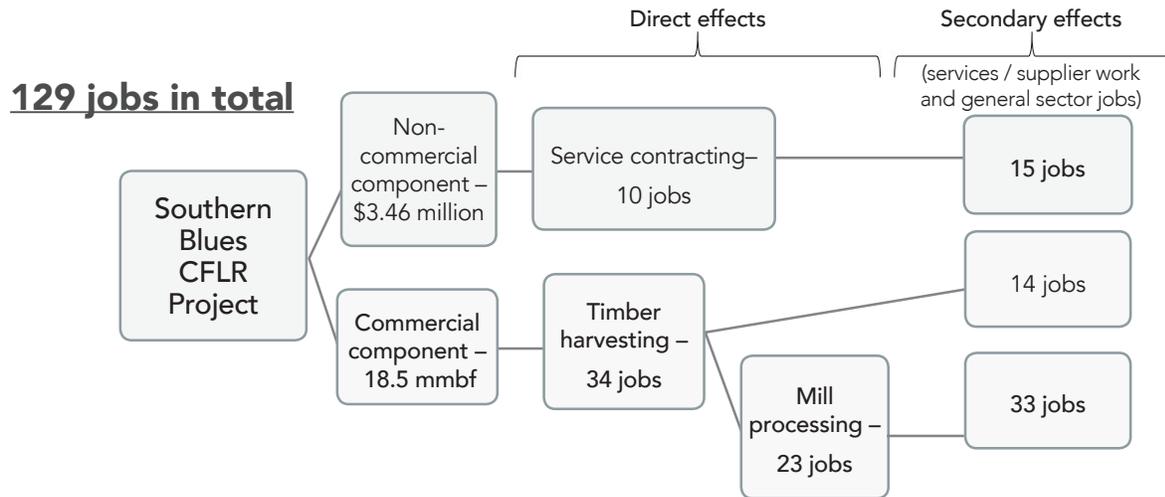
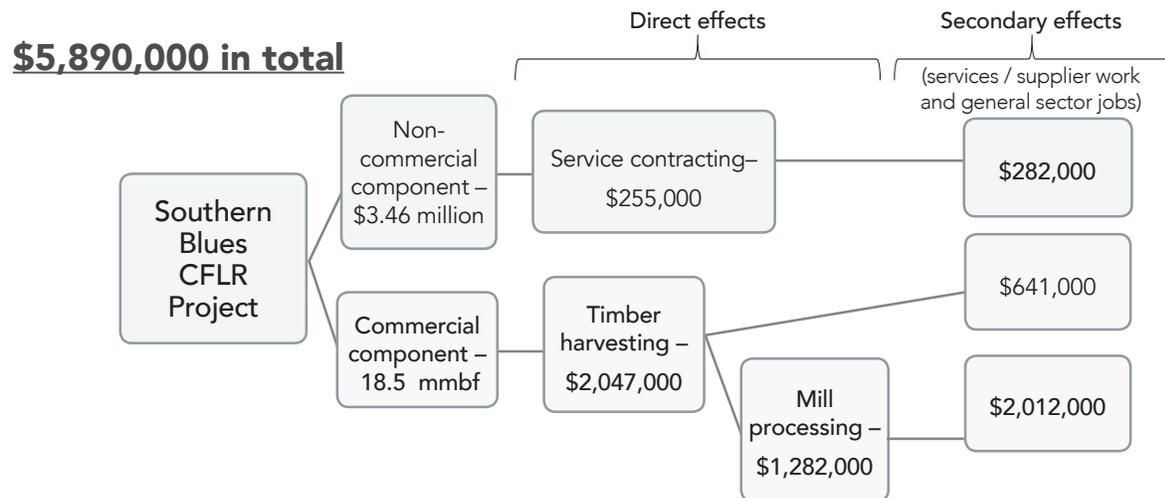


Figure 8 Average annual income supported from restoration projects during the baseline comparison years, 2009-2011



Conclusions

Past management activities on the MNF have influenced the social and economic conditions in Grant and Harney counties. The Southern Blues Project was proposed, in part, to “...contribute to the socioeconomic wellbeing of the rural communities found in the southern Blues.”² The Southern Blues Project has been a source of work for local businesses and has supported jobs and income in the economy of Grant and Harney counties.

Businesses located in Grant and Harney counties were able to capture about 2/3 of the value of the service contracts for CFLR work. That is a larger share of local capture than had been occurring for other service contracts for restoration on the MNF in recent years. Local businesses were especially successful at getting contracts to complete labor-intensive CFLR work.

Local businesses purchased more than 57 percent of the timber volume sold from activities associated with the Southern Blues CFLR Project. Relative to timber sales in recent years, local businesses purchased a much larger share (more than 65 percent) of the non-sawtimber volume that was sold as part of CFLR work. This differs from the recent baseline years, when a few sales with large volumes of non-sawtimber were purchased by non-local businesses. For sawtimber, the comparison between CFLR-associated timber sales and recent past timber sales depends on whether the first sale of the 10-year stewardship contract is included as a CFLR-associated sale. If the 10-year stewardship sale (which happened at the end of fiscal year 2013) is included, then local businesses purchased a much larger share (89 percent) of advertised sawtimber

volume than in the recent past (60 percent). However, when excluding the 10-year stewardship sale, local businesses purchased a slightly smaller share (54 percent) of the sawtimber volume sold than had been the pattern in recent years (60 percent).

Restoration work for the Southern Blues Project supported about 38 jobs per year in Grant and Harney counties in fiscal years 2012 and 2013. Slightly more than half of those jobs are in the woods doing the CFLR work or in mills processing timber associated with CFLR work. The implementation of CFLR work supported about \$1.5 million in income in Grant and Harney counties. About 2/3 of that was associated with directly doing the CFLR work and milling and the remainder to suppliers and service providers in the counties. The job and income estimates are limited to economic activity from contracts and timber sales with private businesses located in the two counties. The jobs on the MNF to plan, implement, and monitor CFLR work, as well as those related to work accomplished via grants and agreements, are in addition to the jobs reported here.

Multiparty monitoring of the Southern Blues Project will continue in the years to come. The procedures we have in this analysis for answering the socioeconomic monitoring questions can be replicated in future socioeconomic monitoring efforts. The results reported here provide a clear comparison for future years. Information from this social and economic monitoring report, coupled with the other reports addressing the biophysical monitoring questions, can help in adaptive management for future Southern Blue Project activities.



Endnotes

- 1 For an overview of Collaborative Forest Landscape Restoration Program see: <http://www.fs.fed.us/restoration/CFLRP/overview.shtml>.
- 2 Malheur National Forest. 2011. Southern Blues Restoration Coalition. Available at <http://www.fs.fed.us/restoration/documents/cflrp/2011Proposals/Region6/Malheur/2011SouthernBluesRestorationCoalitionCFLRPPProposal.pdf>.
- 3 Collaborative Forest Landscape Restoration Program results reports see: <http://www.fs.fed.us/restoration/CFLRP/results.shtml>.
- 4 White, E.M., E.J. Davis, D.E. Bennett, and C. Moseley. 2015. Monitoring of Outcomes From Oregon's Federal Forest Health Program. Ecosystem Workforce Program Working Paper #57. Available: http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP_57.pdf.
- 5 For a table of restoration PSC codes used, see EWP Quick Guide: Assessing, Planning, and Monitoring to Increase Local Economic Opportunities From Restoration. 2015. Available at: http://ewp.uoregon.edu/sites/ewp2.uoregon.edu/files/QG_RestorationOpps.pdf.
- 6 For information and data see: <http://implan.com/>.
- 7 White, E.M., E.J. Davis, and C. Moseley. 2015. Social and economic monitoring for the Lakeview Stewardship Collaborative Forest Landscape Restoration Project. Ecosystem Workforce Program Working Paper #55. 32 p. Available: http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP_55.pdf.
- 8 Ellison, A., D. Bennett, M. Knapp, E.M. White, E.J. Davis, and C. Moseley. An assessment of federal restoration contracting and contractor capacity in Northeastern Oregon. Ecosystem Workforce Program Working Paper #58. Available : http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP_58.pdf.
- 9 Amount of sawtimber is based on advertised sales records and is determined by the Forest Service. Actual sawtimber volumes when harvested may differ from what was advertised.
- 10 After the first year of harvesting activities, the sawtimber component of the first sale the 10-year stewardship contract was less than in the sales advertisement. For more information see: http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS_5.pdf.
- 11 See information on product types and tree species processed from recent restoration harvests at: http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/FS_5.pdf.



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