

SELWAY-MIDDLE FORK COLLABORATIVE FOREST LANDSCAPE RESTORATION PROGRAM 2014 SOCIO-ECONOMIC MONITORING REPORT

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Clearwater Basin Collaborative

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EXECUTIVE SUMMARY

The Selway-Middle Fork Collaborative Forest Landscape Restoration Program (CFLRP) 2014 Socio-economic Monitoring Report is the third annual socio-economic monitoring report for the Selway-Middle Fork CFLRP prepared by the Clearwater Basin Collaborative (CBC).

The Selway-Middle Fork CFLRP is located within the 6 million acre Clearwater Basin in Idaho and is characterized by its high percentage of federal lands, Nez Perce tribal lands, and congressionally designated Wilderness. The Selway-Middle Fork CFLRP area was chosen for its unique ecological value, for its restoration and socio-economic needs, and for its track record of forest collaboration. The Selway-Middle Fork CFLRP 5 Year Report (2015) says,

The desired outcome of [the Selway-Middle Fork CFLRP] is a measurable shift toward terrestrial and aquatic restoration that achieves the desired future conditions on a landscape scale while generating forest products and other opportunities that benefit local economies. (p. 5)

Lee VanderWater uses CFLRP funds to do trail work in the lower Lochsa River, Lee spent his summers growing up in the Clearwater Basin. His parents cleared these same trails and worked in lookouts. All CFLRP projects must be "developed and implemented through a collaborative process." Founded in 2008, the Clearwater Basin Collaborative (CBC), which provides that collaborative process for the Selway-Middle Fork CFLRP, is an innovative partnership of twenty-one tribal, federal, state, local, industry, and conservation associations in central Idaho united by a shared vision: "to enhance and protect the ecological and economic health of the forests,

rivers, and communities within the Clearwater Basin." The CBC seeks to develop resource management priorities collaboratively among historically conflicted parties, finding solutions that take all stakeholders' interests into account.

CFLRP projects are an innovative part of the ongoing development of collaborative partnerships promoted by both the U.S. Forest Service (USFS) and stakeholder groups as a better way of making land use decisions. The USFS recognizes that establishing communication and learning about the priorities of other stakeholders are the goals of collaboration along with forest restoration.

Ecosystem Research Group (ERG) was first contracted in 2012 by the Clearwater Resource Conservation and Development Council to collect existing baseline information as well as to conduct new research on the socio-economic impacts that the CFLRP has had in the project area and nearby communities. The analysis herein is quantitative as well as qualitative. Examples of the quantitative analysis include the number of jobs supported with CFLRP funds and the number of board feet of timber sold. The qualitative analysis zooms in and communicates how the Selway-Middle Fork CFLRP has impacted the lives of local residents and helps to tell the story behind the numbers, tracing the impacts to individuals and firms.

Omnibus Public Land Management Act of 2009 (Public Law No. 111-11, tit. IV, 123 Stat. 991)

ECONOMIC IMPACTS

Cook and Sons Construction used CFLRP funds to install a bridge, construct a bypass ditch, install culverts, and restore a pond at the Fenn Ranger Station. This contract helped support the employment of eight individuals with health insurance benefits.

In 2014 there were \$1,075,002 in CFLRP funds awarded in 19 contracts. Local contractors received 17 contracts and two were received by non-local contractors. Contracts were awarded for roads and trail work and slide repair and ecosystem restoration. For 2014, 88% of the awarded CFLRP funds went to local contractors and 12% went to non-local contractors.

There were \$1.6 million in CFLRP funds obligated to agreement partners in 2014. These funds were obligated for monitoring, trail

maintenance, weed management, wildlife habitat restoration, formal job training, elk forage surveys, and road work. The contracts, agreement funds, and matching and leveraged funds are estimated to have supported 151.3 full and part-time jobs in the project area for 2014. About 37% of the total full and part-time jobs directly and indirectly created by CFLRP funds were associated with commercial forest product activities. The remainder, 63%, were in other project activities such as road work and trail maintenance.

FOREST PRODUCTS INDUSTRY

In 2014 there were two active harvest projects on Forest Service lands that harvested 952.8 hundred cubic feet (CCF) of forest products and performing restoration work on 269 acres in the project area. An additional 14,659.1 CCF of Forest Service timber was sold in 2014. There were 860.1 green tons of small diameter trees removed and made available for bio-energy production.

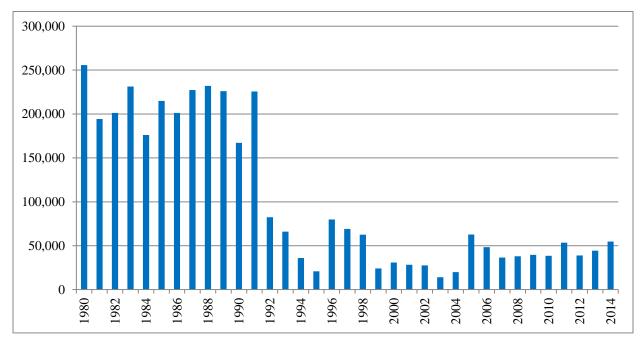


Figure 1. Sold timber volume in board feet for the Nez Perce-Clearwater National Forests (Headwaters Economics 2015).

REDUCTIONS IN WILDFIRE COSTS

In 2014 there were 19 wildfires managed for restoration purposes. Those fires either moved or maintained desirable forest conditions on 7,150 acres. Currently the Forest Service has 5,000 acres prepared for prescribed burning within the project area. The Idaho County Wildfire Mitigation Department reduced fuels on 176.1 acres of private lands within the project area. Carl Davis of Davis Resources, a trail maintenance contractor, made the point during discussions this year that, "The policy to let Wilderness fires burn makes sense in terms of lower fire costs, but please recognize the effect that fires have on trails. Trails become impassible for years after these fires, resulting in less and less use of those areas for recreation."

FORMAL JOB TRAINING AND ON-THE-JOB TRAINING

In 2014, CFLRP agreement funds supported entry level, formalized job training for young people through the Clearwater Basin Youth Conservation Corps, the Montana Conservation Corps, and the Selway Bitterroot-Frank Church Foundation. CFLRP contract funds supported on-the-job training for many of the employees of firms that received contracts in 2014.

The CBC used CFLRP funds to hire four crews in 2014 for the Clearwater Basin Youth Conservation Corps, providing job training opportunities while fulfilling the need for local forest management.

JOHNSON BAR FIRE

The Johnson Bar Fire burned over 13,000 acres within the CFLRP project area in 2014, much of which was being analyzed for a large-scale restoration project to reduce fuel loads and generate forest products. According to the Selway-Middle Fork CFLRP 5 Year Report (2015), "This fire illustrates the need for accelerated restoration treatments like those funded through the CFLR program." If the restoration project had already been implemented, "it is likely the Johnson Bar Fire could have been quickly extinguished, saving the taxpayers \$12 million in fire suppression costs, and undesired ecological consequences" (Clearwater Basin Collaborative 2015).

NATIONAL CFLRP FIVE-YEAR REPORT

Williams and Sons, LLC used CFLRP funds in 2014 to replace small, damaged culverts with a nine foot diameter culvert and retaining wall to simulate a stream bed. They purchased the culvert in Spokane and the geotextile in Coeur d'Alene.

In March of 2015 the USFS released a five-year report on the CFLRP. Thus far, the CFLRP has generated more than 1,256 million sold board feet of timber, \$661 million in local labor income, and has supported, on average, 4,360 jobs per year. The Selway-Middle Fork CFLRP was one of the first of 23 CFLR programs nationwide since 2010. The 2015 CFLRP five-year report says that, "every \$1 million spent on restoration activities generates 15 to 24 local jobs, comparable to the construction and

infrastructure sectors" (p. 5). Healthy forests and improved infrastructure generates and provides access to more ecosystem services, which benefit users at the local, regional, and national scale. The report found that investments of CFLRP funds have not been enough to overcome the hurdles of a lack of local markets and infrastructure for forest products in some CFLRP project areas.

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THE AGRICULTURE ACT OF 2014

The Agriculture Act of 2014, also known as the 2014 Farm Bill, authorizes nutrition and agricultural programs in the U.S. for the years 2014 through 2018. The bill authorizes \$956 in spending over the next ten years. The Biomass Crop Assistance Program was authorized under the 2014 Farm Bill and was used this year within the Selway-Middle Fork CFLRP for the Lodge Point Stewardship Project.

The 2014 Farm Bill permanently reauthorizes stewardship contracting² and extends the good neighbor authority³ nationwide and onto Bureau of Land Management (BLM) lands. It also authorizes the designation of treatment areas within the National Forest System due to insect or disease infestation, and allows for expedited project planning within those designated areas through the Collaborative Restoration Project program (this is different from the CFLR program). "Issues from this and previous farm bills may also become of interest again in the future, such as assisting forest-dependent communities in diversifying their economies or providing payments for ecosystem services" (Hoover 2014).

DISCUSSION

With a declining work force and low timber harvest volumes in the Clearwater Basin in 2014, the success of the Basin's forest restoration economy has become more reliant on the CFLR program.

The CFLRP provides quantifiable benefits in terms of jobs, wages, and ecological indicators. Continued socio-economic monitoring should seek to quantify ecological benefits in economic terms of ecosystem services. Continued monitoring should also seek out evidence and report on the less tangible benefits, such as the benefits of good faith and good will amongst divergent interests.

Providing both formalized and on-the-job training opportunities is an important benefit of the CFLRP, which gives communities hope of being able to provide their children with career opportunities and is providing the worker training necessary for the continued success of the restoration economy.

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² Stewardship contracting seeks "to promote a closer working relationship with local communities in a broad range of activities that improve land conditions. These projects shift the focus of federal forest and rangeland management toward a desired future resource condition. They are also a means for federal agencies to contribute to the development of sustainable rural communities, restore and maintain healthy forest ecosystems, and provide a continuing source of local income and employment" (U.S. Forest Service 2015(c)).

³ The Good Neighbor Authority allows the U.S. Forest Service to enter into cooperative agreements or contracts with states to allow states to perform watershed restoration and forest management services on National Forest System lands.

1. BACKGROUND

This report documents the 2014 social and economic impacts of the Selway-Middle Fork Collaborative Forest Landscape Restoration Program on jobs, the forest product industry, the reduction of wildfire costs, and on training programs for forest workers in the project area.

In the sections that follow, background information has been provided on the project area, methods for assessing the social and economic impacts, and on the assessed impacts for 2010 through 2013. The social and economic impact analysis for 2014 is then presented, including the results of discussions held with agreement partners and contractors. Finally, we have provided a discussion section, where the "so what?" of the impact analysis is elucidated.

1.1 DESCRIPTION OF THE PROJECT AREA

The project area encompasses of 1.4 million acres of the six million acre upper portion of the Clearwater Basin (Figure 2). National Forest ownership makes up 94% of the land base and includes portions of the Bitterroot National Forest and the Nez Perce-Clearwater National Forests. Most of the National Forest lands in the project area lie within designated Wilderness. Private ownership makes up 4% of the project area, while the Idaho Department of Lands owns 1% and the Nez Perce Tribe owns less than 1%.

1.2 PRIMARY AND SECONDARY AREAS OF ECONOMIC IMPACT

The primary area of economic impact was defined as the three counties in close proximity to the project area in the initial socio-economic report for the Selway-Middle Fork CFLRP (2012), including Clearwater, Idaho, and Lewis Counties. The secondary area of economic impact included Asotin, Latah, Nez Perce, Ravalli, and Missoula Counties.

There are three substantial communities close to the project area, two in Idaho and one in Montana. The two Idaho communities are in the primary economic impact area for the Selway-Middle Fork CFLRP; on the north edge of the project area is the Lowell and Syringa community and on the west edge is the Elk City and Red River Hot Springs community. The east side of the project area is accessed through Ravalli County in Montana and includes the Darby, Sula, and Hamilton community. This community is considered part of the secondary economic impact area. The cities of Missoula and Lewiston also lie within in the secondary economic impact area. For the purposes of categorizing the geographical distribution of contracting funds later on in this report, the primary and secondary areas of economic impact are considered the local area.

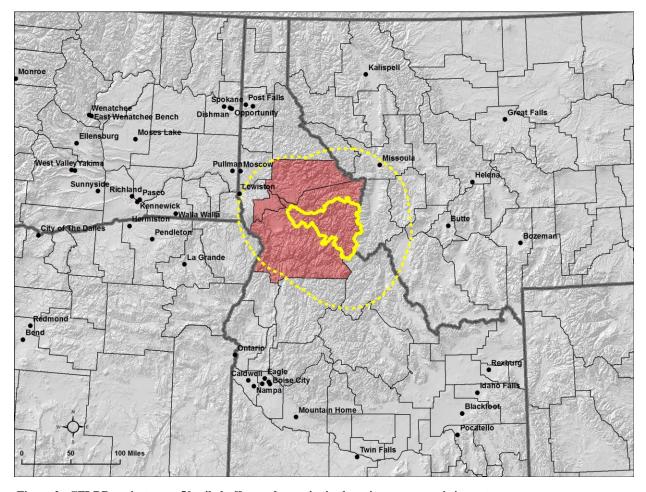


Figure 2. CFLRP project area, 50 mile buffer, and counties in the primary economic impact area.

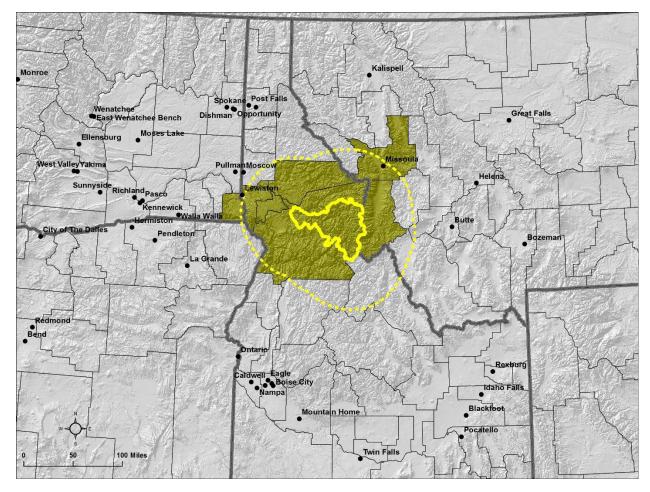


Figure 3. CFLRP project area, 50 mile buffer, and counties in the economic impact area.

2. LITERATURE REVIEW

This literature review focuses on new studies of the social and economic benefits of forest restoration, with a particular emphasis on the link between restoration, ecosystem services, 4 and the value of recreation.

2.1 THE ECOLOGICAL NEED FOR RESTORATION IN THE CLEARWATER BASIN

Ryan Haugo and Nathan Welch of The Nature Conservancy in Idaho published a report titled, "Current Ecological Conditions and Restoration Needs in Forests of the Clearwater Basin, Idaho" (2013). This report posits that the CBC sees great potential to benefit the health of the Basin's forests, rivers, and communities through the synergy between forest restoration and the forest industry, but that the lack of comprehensive information on ecological conditions across the entire Basin has made it difficult to create a shared understanding of the needs for forest restoration. The report documents the current vegetation conditions and identifies restoration needs in the forests throughout the Basin. Haugo and Welch found that 61% of forest conditions in the Basin have departed moderately to severely from historic conditions, with historic mixed severity fire regime forests being the most common forest type and the most commonly departed from historic conditions. While less common, historic low severity fire regime forests also have substantial levels of departure from historic conditions and historic high severity fire regime forests have the lowest departure from historic conditions. This report identifies 1,322,000 acres of coniferous forests in the Basin that are in need of active restoration, which would leave 28% of the basin moderately to severely departed from historic conditions. Research suggests that restoring these forests to near historic conditions will increase the resilience of these forests in a warming climate. This paper indicates that forest restoration efforts must consider spatial patterns at both the stand and landscape level. These considerations are critical to effecting fire spread, insect dispersal, and wildlife movements.

Ryan Haugo of the Nature Conservancy in Idaho and Travis Benton of ERG released a paper titled, "Forest Composition and Structure Restoration Needs within the Clearwater Basin, Idaho" (2014). In this paper, Haugo and Benton found that 35% of all forested acres on the Nez Perce-Clearwater National Forests and adjacent ownerships are currently in need of disturbance to restore historic forest conditions. On acres classified as suitable for timber production by the Forest Service, 49% of those forests needed disturbance restoration. By contrast, 35% of coniferous forests within no harvest zones and 23% of private forests were in need of disturbance restoration. Disturbance restoration needs were dominated by the need for thinning and low severity fire within dry and low to mid-moist forests. Other findings from this paper included: (1) only 9% of all forested acres require time to grow into larger successional classes to reach historic conditions, (2) climate change will likely increase disturbance restoration needs, (3) smaller scale landscape prescriptions are essential to the success of restoration efforts, and (4) a successful restoration effort will require coordination amongst all forest ownerships and management designations and will require the entire

⁴ Ecosystem services are defined here as the benefits that people obtain from ecosystems. The ecosystem services concept, which applies neoclassical economic theory to ecological accounting, continues to gain traction in natural resource management. For example, the Forest Service's 2012 Planning Rule requires that forests assess ecosystem services during forest plan revision and the 2015 White House Memorandum on Ecosystem Services sets into motion the process of the federal government assessing the effects of federal actions on ecosystem services.

suite of tools available to land managers, including timber harvests, prescribed fire, wildland fire, and wildfire protection.

2.2 SOCIAL AND ECONOMIC BENEFITS OF FOREST RESTORATION

2.2.1 Modeling Recreation Demand and Economic Impacts due to Fire and Fuels Management

In a journal article titled, "Simulating changes in forest recreation demand and associated economic impacts due to fire and fuels management activities" (2004), Starbuck et al. used travel cost modelling⁵ and contingent valuation⁶ to estimate the consumer surplus and recreation visits under different fuels management scenarios in New Mexico. For comparison, they simulated the regional economic impacts of forest fire closure scenarios during the summer recreation season. This analysis indicated that while changes in forest recreation demand due to fire and fuels management activities do impact the regional economy, those losses pale in comparison to the economic losses of closures of the forest due to hazardous fire conditions. "Hazardous fuels reduction and forest management policies that minimize the risk of catastrophic fire, and the need for complete forest closures, can help reduce the impact of wildland fire on the economy" (p. 64). For perspective, a 60-day closure of all five of New Mexico's National Forests in 2001 was estimated to cause a \$478.89 million loss in the state's economic output. That loss can be compared against a total of only \$15.82 million in fuel treatment costs in New Mexico in 2002.

2.2.2 Benefits of Investments in Fuel Removal

In a paper titled, "Investments in Fuel Removals to Avoid Forest Fires Results in Substantial Benefits" (2006), Mason et al. performed a cost benefit analysis of forest fuel removals that includes non-market values. A summary of the cost benefit analysis appears in Table 1 and shows the positive economic benefits of fuels reduction, without calculating many of the costs and benefits to the environment, including avoided costs of impacts to habitat, water, and erosion and the costs of fuels removal on the environment. These costs and benefits can be quantified in terms of ecosystem services, making such cost benefit analyses for fuel treatments more exact.

Table 1. Summary of costs and benefits of fuel removals for fire risk reduction (Mason et al. 2006).

Treatment Benefits	High Risk Value Per Acre	Low Risk Value Per Acre
Firefighting costs avoided	\$481	\$231
Fatalities avoided	\$10	\$5
Facility losses avoided	\$150	\$72
Timber losses avoided	\$772	\$371
Regeneration and rehabilitation costs avoided	\$120	\$58
Community value of fire risk reduction	\$63	\$63
Regional economic benefits	\$386	\$386

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⁵ Travel cost modeling is a revealed preference method for assessing non-market values. The aim is to calculate consumer's willingness to commit time and travel expensed to visit a site.

⁶ As opposed to travel cost modeling, contingent valuation is a stated preference method used to value non-market resources, whereby consumers are asked how much they would be willing to pay to maintain an environmental feature.

Treatment Benefits	High Risk Value Per Acre	Low Risk Value Per Acre
Habitat, smoke, energy, water quality and quantity, erosion, and other costs to values avoided	\$?	\$?
Total Benefits	\$1,982	\$1,186
Implementation and transaction costs	(\$580)	(\$580)
Environmental costs of fuel removal	(\$?)	(\$?)
Total Costs	(\$580)	(\$580)
Net benefits from fuel removals	\$1,402	\$606

2.2.3 Benefits of Applying the Ecosystem Services Framework to Forest Restoration Efforts

Ecosystem services can be defined as the ecological components that humans directly consume or enjoy (Boyd and Banzhaf 2007). ERG's review of ecosystem service literature has highlighted that the ecosystem service framework and the valuation of ecosystem services are useful for supporting rational natural resource allocation, tradeoff, and utilization policies (Loomis 2000, Pearce 2001, OECD 2001, Christie et al. 2006, Hicks et al. 2009, Anton et al. 2010). More specifically, the ecosystem service framework and the valuation of ecosystem services:

- 1. Can inform how land use affects the total economic value of socio-ecological systems (Martín-López, García-Llorente, Palomo, & Montes, 2011),
- 2. Can place discrete areas such as the Clearwater Basin into the larger biological, social, political, and economic contexts, building greater awareness amongst stakeholders and managers alike for the distribution of benefits and costs (O'Connor et al., 2003; Rogers et al., 2010; Badola et al., 2010),
- 3. Can use the information derived from the application of an ecosystem service framework and the valuation of ecosystem services to better inform decisions that support both the resilience of the ecosystems and the economic sustainability of the local communities (Martín-López et al., 2011),
- 4. Can build awareness for how maintaining the productive capacity of ecosystems may complicate local economic access to direct-use, production ecosystem services such as food, fuel, range, and building materials at least in the short term, but increases the long-term productive capacity of the full-suite of ecosystem services (Martín-López et al., 2011).
- 5. Can demonstrate the relationship between ecosystem services. For example, when areas are designated to protect bequest, existence, and direct-use non-extractive values (such as wilderness), the maintenance of those values supports the maintenance of indirect-use values such as water filtration and erosion prevention (Rogers et al., 2010).
- Can indicate economically efficient solutions for competing uses of resources, thereby helping decision-makers make informed choices about trade-offs (Christe, 2006; Loomis, 2000; OECD, 2001; Pearce, 2001).
- 7. Can help planners make informed decisions regarding the allocation of resources for conservation and understand the distributional impacts of the benefits as well as costs (Badola et al., 2010). According to Badola et al. (2010), "Unless the cost of conservation are assessed and it is clear who pays the costs and what they get in return, conservation interventions will not be as effective" (p. 321).

In a webinar regarding the White House's Memorandum, "Incorporating Ecosystem Services into Decision-Making", ERG asked if the Council on Environmental Quality (CEQ) sees the potential for applying the ecosystem service framework to areas such as the Clearwater Basin, Sarah Stryker with the CEQ responded,

Absolutely. In fact, we just had a meeting about the wildland urban interface (WUI) the other day, and the Forest Service has been in the lead amongst agencies in applying the ecosystem service framework through the implementation of their 2012 Planning Rule. The WUI is a great example of how to share an agency's expertise in managing ecosystem services. [Applying the ecosystem service framework to the WUI in the West] certainly has the potential to be one of the gold standard examples of the application of the ecosystem service framework amongst federal agencies" (personal communication, October 7, 2015).

2.2.4 Effects of Forest Restoration on Stream Shading Services in the Clearwater Basin

A study by Mark Teply and Dale McGreer, titled, "Simulating the Effects of Forest Management on Stream Shade in Central Idaho" (2013) modeled the potential effects of the Idaho Forestry Program (IFP), a major conservation agreement that the State of Idaho is pursuing with federal agencies on stream shade. The study found that implementation of the IFP would reduce stream shading by approximately 5% when compared to a "business as usual" scenario and that implementation of the IFP would not meet the shading target levels put forth by the Idaho Department of Environmental Quality.

2.2.5 Social Benefits of Collaboration in Forest Restoration

A study by Sandra Pinel, titled, "Giving and Reciprocity in Natural Resource Management and Consensus Building: An Application of Economic Anthropology to Understanding the Clearwater Basin Forest Collaborative" (2013) found that, despite success in civil discourse and relationship building amongst 24 divergent interests, the Collaborative has yet to reach consensus on wilderness designations and solutions for local economies affected by timber sales. The paper applies gifting and exchange concepts from economic anthropology to observations of the CBC to understand how collaborative processes address intractable conflicts through social relationships.

2.2.6 Synthesis of the Literature Reviewed

Haugo and Welch and Haugo and Benton (2013, 2014) suggest that there is great potential for forest restoration in the Basin to benefit the health of the forests, rivers, and communities through the synergy between forest restoration and the forest industry. To aid in that effort, the authors have provided essential information on ecological conditions across the entire Basin. This information can be used to inform a shared understanding of the ecological need for forest restoration within the CBC and the communities of the Basin. Studies such as Starbuck et al. (2004) and Mason (2006) demonstrate the positive economic benefit of forest restoration, but they do not provide a full accounting of the total economic value, most notably leaving the costs and benefits of forest restoration to ecosystem services off of the ledger. Calculating the impact of forest restoration on ecosystem services in the Basin would provide the CBC with information to support a shared understanding for the total cost and benefits of restoration and a shared understanding of who bears those costs or receives those benefits.

Studies such as Teply and McGreer (2013) show that there are often tradeoffs in ecological restoration. In the case of their study, the tradeoff is between the benefits of forest management and the benefits of stream

shading. Information about the values involved in these types of tradeoffs would allow managers to make decisions regarding tradeoffs that maximize the value of ecosystem goods and services produced by the acres in question. Perhaps it is this kind of information that could help resolve the issues that the CBC is facing, which are described as "intractable" by Pinel (2013).

Lastly, Pinel (2013) acknowledges the success of the CBC in conducting civil discourse and the success of the CBC in building working relationships amongst its 24 members with divergent interests. The value of these successes can be elusive and is not sufficiently reported in the following pages, but the value of those successes are certainly real and are in addition to the values reported here. Perhaps those values are best captured by analyzing the avoided transaction costs that would otherwise stand in the way of project implementation. These costs may include avoided miscommunication and litigation costs as well as the costs associated with delayed project implementation.

3. SOCIO-ECONOMIC CONDITIONS AND TRENDS

3.1 POPULATION

The three counties in the primary economic impact area, Clearwater, Idaho, and Lewis Counties, have the lowest population levels within the primary and secondary area of economic impact. Asotin County has the lowest population within the secondary area of economic impact. The population in Asotin in 2014 was 22,623, as compared to 40,007 in Nez Perce County.

Table 2. County population census 2000 and 2010 and estimates for 2014 (U.S.Census Bureau 2015).

County	2000	2010	2014 (estimates)
Clearwater County	8,930	8,761	8,562
Idaho County	15,511	16,267	16,215
Latah County	34,935	37,244	38,411
Lewis County	3,747	3,821	3,838
Nez Perce County	37,410	39,265	40,007
Missoula County	95,802	109,299	112,684
Ravalli County	36,070	40,212	41,030
Asotin County	20,551	21,623	22,623

3.2 LABOR FORCE AND EMPLOYMENT

Figure 4 shows the historical trend in unemployment. In the primary area of impact, unemployment levels are highest in Clearwater County. In the secondary area of impact, Asotin and Ravalli Counties have tended to alternate as the Counties with the highest unemployment, with Ravalli being higher in 2014. In the primary area, Lewis County has consistently had the lowest unemployment rate since 2000 and in the secondary area, Missoula County and Latah County have been on similar trends of relatively low unemployment since 2007. In general, unemployment rates dropped until 2007, when they rose precipitously across several counties. In general, the rates peaked in about 2011 and have been declining ever since. Though, as of 2014, no county in the primary or secondary area has returned to their low unemployment rates of 2006 or 2007.

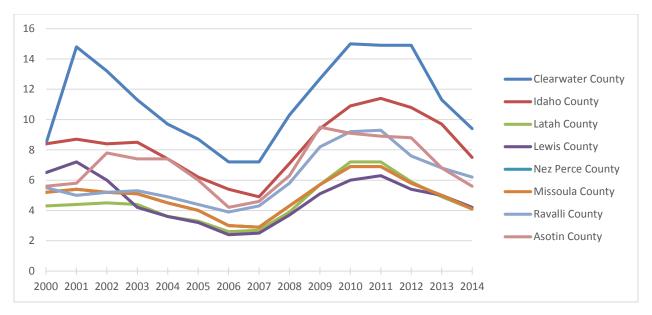


Figure 4. Percent unemployment by county, 2000 to 2014 (U.S.Bureau of Labor Statistics 2015).

Labor force is the sum of employed people and those looking for work. Figure 5 shows the yearly trend in the labor force for 2009 through 2014 in Clearwater County. The labor force in Clearwater County has declined by 6% since 2009. The yearly trend in the labor force in Clearwater County shows employment peaking in July with a decline around the end and beginning of each year. The underlying cause of the outlying peaks in labor force in March and June in Clearwater County in 2009 and 2010 is as of yet unknown. Perhaps they correspond to an intermittent peak in spring or early summer economic opportunity in the county, such as mushroom picking, reflected here as a spike of two to three hundred individuals entering Clearwater County's labor force. If short-lived intermittent peaks in labor force are a direct result of short-lived intermittent peaks in economic opportunity on public lands, it might behoove the Selway-Middle Fork CFLRP if these yearly socio-economic reports provided insights into what the underlying cause of those peaks are and how they affect socio-economic conditions of the primary and secondary area.

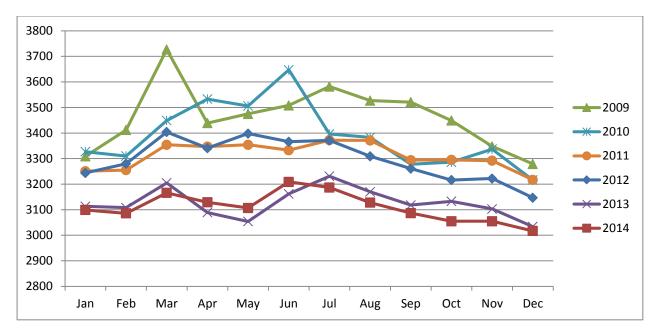


Figure 5. The labor force by month in Clearwater County, Idaho (U.S.Bureau of Labor Statistics 2015).

The 2009 and 2010 peaks in labor force are also reflected in Figure 6, which shows the number of employed individuals in Clearwater County, by month, from 2009 to 2014. Comparing 2009 in both figures, the peak in labor force was composed of about 300 people, while the peak in employed individuals was closer to 200 individuals, suggesting that about a third of the peak in labor force was due to an influx of unemployed individuals. The 2010 peak was about 200 people in both figures, suggesting an influx of employed individuals almost exclusively. Also, the March 2009 peak in employed individuals was overshadowed by a later peak in July. This lends further evidence to the notion that 2009 had an influx in intermittent and seasonal economic opportunity in Clearwater County.

From 2009 to 2014, April was a month of relatively low employment when compared to March and May. Perhaps too, this is a result of seasonal economic factors, such as spring "break up" when work in the mountains is not as feasible as it is when the ground is either frozen or dry. This April down time in employment may be a good time to schedule job training programs for forest workers.

If 2009 was a notably good year for employment in Clearwater County, 2013, while less notable, was a bad year for employment in Clearwater County.

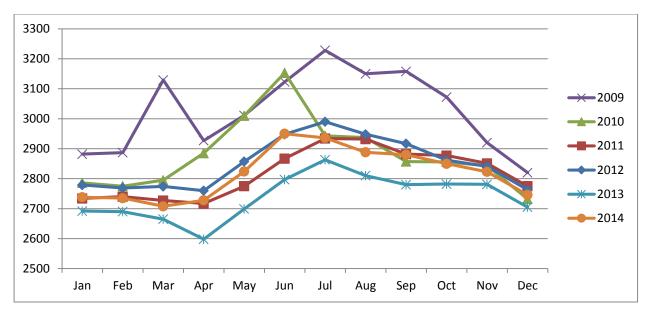


Figure 6. People employed in the workforce in Clearwater County (U.S.Bureau of Labor Statistics 2015).

Figure 7 shows monthly trends in the unemployment rate in Clearwater County for 2009 through 2014. Peak unemployment tends to occur in March, which confounds the data presented in Figure 6. Perhaps this is an artifact of how the data are reported. No other explanation lies within easy reach. Also somewhat confounding is the notably low unemployment levels in 2014, where total employment numbers for 2014 in Figure 5 are closer to the mode. This must be a function of the difference between the percent of the workforce unemployed (unemployment rate) and the total number of people employed and thus must mean that the labor force (total of employed people and people looking for work) in 2014 was also low. Indeed, this plays out correctly in Figure 4, where 2013 and 2014 had notably lower total workforce numbers.

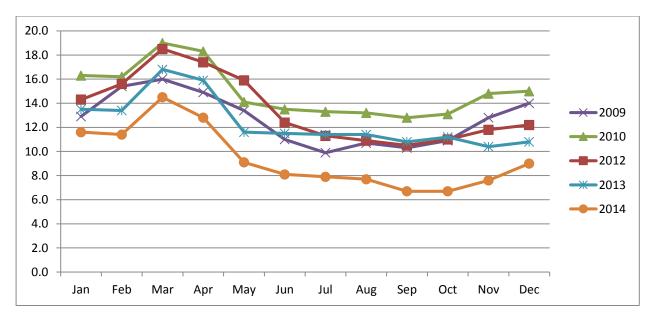


Figure 7. Unemployment rate in Clearwater County by month (U.S.Bureau of Labor Statistics 2015).

Figure 8 shows that the monthly workforce numbers for 2014 were about 1000 people or 13% lower than 2009 through 2013 for Idaho County. Clearwater County, in Figure 4, also shows lower numbers for 2014, though the departure from 2009 through 2013 is much less notable. Table 2 shows a small decline in the population of Idaho County between 2010 and 2014, but not enough to explain the decline in workforce. Therefore, of the 1,000 people that left the workforce in 2014 few likely left the County. No explanation of Idaho County's notable change in workforce for 2014 can be easily concluded for this report. For 2009 through 2013, the workforce in Idaho County was relatively stable.

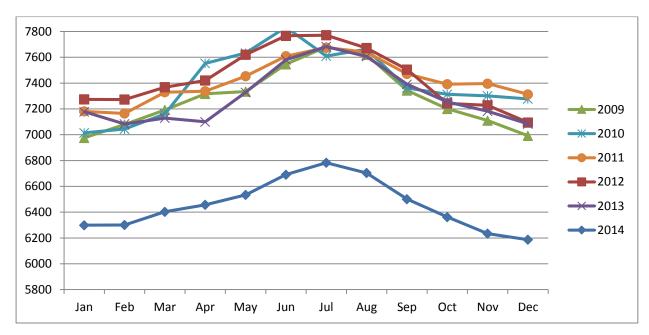


Figure 8. The labor force by month in Idaho County, Idaho (U.S.Bureau of Labor Statistics 2015).

The total number of people employed in Idaho County declined by about 400 people in 2014 (Figure 9). Therefore, the socio-economic conditions that created a notable decline in the workforce in 2014 in Figure 8 had an effect on the total number of people employed in Idaho County in 2014. If about 1,000 people left Idaho County's workforce in 2014 and 400 of those people were employed, then two-fifths of the workforce that left Idaho County in 2014 were employed. Outside of 2014, the number of employed individuals in Idaho County has remained stable for 2009 through 2013.

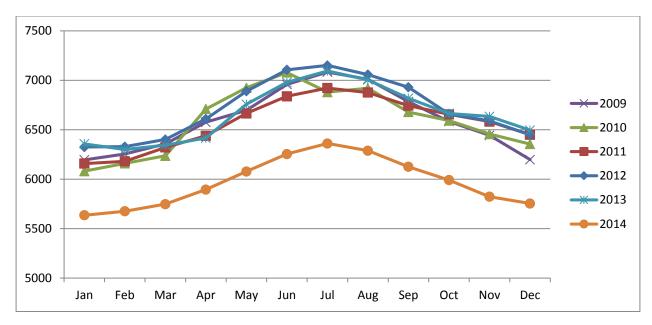


Figure 9. The number of people employed in Idaho County, Idaho (U.S.Bureau of Labor Statistics 2015).

The peak unemployment rate for Idaho County between 2009 and 2014 occurred in 2011, and the lowest unemployment rate occurred in 2014 (Figure 10). The 2014 unemployment rate suggests that, while the workforce declined notably in 2014, employment increased by about 2%.

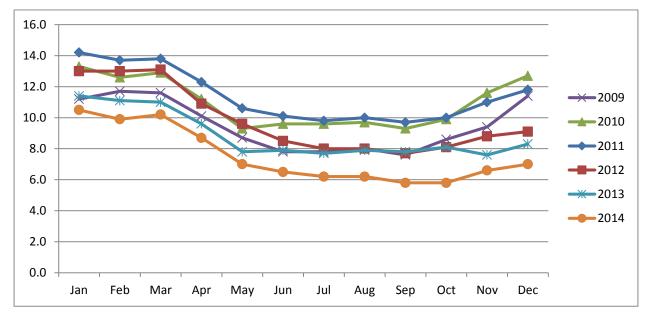


Figure 10. Rate of unemployment by month in Idaho County, Idaho (U.S.Bureau of Labor Statistics 2015).

Lewis County had a decline in the labor force of about 200 individuals in 2014 (Figure 11). Similar to Idaho County, the underlying cause of the decline is unknown at the writing of this report. From 2009 to 2013, the labor force of Lewis County remained relatively stable.

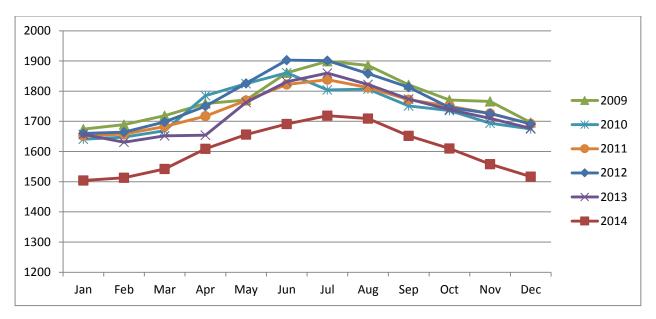


Figure 11. The labor force by month in Lewis County, Idaho (U.S.Bureau of Labor Statistics 2015).

Lewis County showed a decline of about 100 employed people in 2014. This is related to the decline in labor force and means that about half of those that left Lewis County's labor force in 2014 were employed.

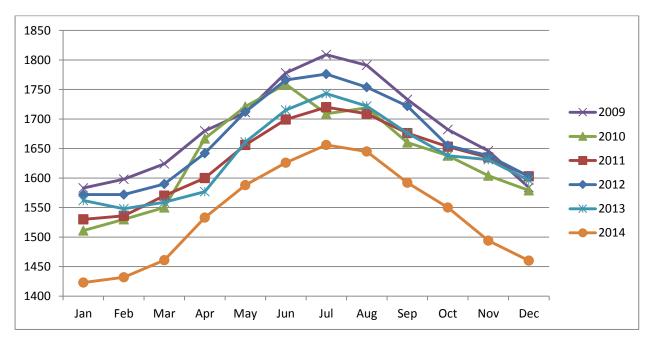


Figure 12. The number of people employed in Lewis County, Idaho (U.S.Bureau of Labor Statistics 2015).

With each year averaged, the lowest unemployment rate between 2009 and 2014 in Lewis County occurred in 2014 (Figure 13).

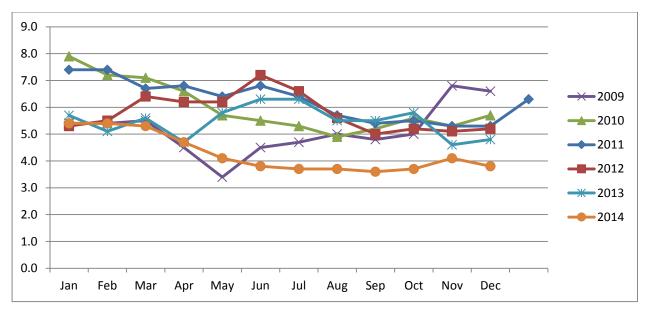


Figure 13. Rate of unemployment by month in Lewis County, Idaho (U.S.Bureau of Labor Statistics 2015).

3.3 FOREST PRODUCT INDUSTRIES

There are 16.6 million acres of unreserved timberland in Idaho,⁷ but the presence of these lands is not a strong indicator of harvest activity in recent years (Simmons et al. 2014). Markets and policy issues have an influence on the location, ownership, and volume of timber harvested in Idaho. More than three quarters of Idaho's available timber resources are on federal lands (Cook et al. 2015).

The timber harvest volumes in the last decade in Idaho ranged from 1.1 billion board feet in 2004 and 2005 to 760 million board feet in 2009 (Simmons et al. 2014). The recent low harvest years in Idaho are the lowest years seen since World War II and represent the period of greatest impact on Idaho's timber industry from the collapse of the housing market associated with the Great Recession (Simmons et al. 2014).

Federal timber sales provided 30-40% of the timber volume in the early 1990s and declined to less than 15% by 2000 (Simmons et al. 2014). The decline in federal timber sales was met by a corresponding increase in timber harvest volumes from private lands in the mid to late 1990s and early 2000s and a doubling of harvest volumes from state lands in the mid-2000s (Simmons et al. 2014). Also, as federal harvest volumes declined in the 1990s and 2000s, the source of Idaho's timber volume shifted north of the Salmon River, which now accounts for 80 to 90% of the annual harvest volume (Simmons et al. 2014). Since 1995, six out of Idaho's 44 counties, all north of the Salmon River (Shoshone, Clearwater, Benewah, Latah, Kootenai, and Bonner), have supplied the vast majority of timber harvest volume in the state (Simmons et al. 2014). Figure 14 shows the volume of timber sold by the U.S. Forest Service in Region 1 from 1980 to 2014, which includes the area north of the Salmon River in Idaho and Montana and North Dakota. Figure 15 shows the volume of timber sold per year on the Nez Perce - Clearwater National Forests between 1980 and 2014. Both of these figures demonstrate the precipitous decline in timber volume sold

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⁷ Unreserved timberland is defined here as land capable of producing 20 cubic feet per acre per year of wood from trees classified as a timber species on land designated as a timber forest type that is not designated as reserved, such as is the case with designated Wilderness.

on National Forest System lands north of the Salmon River in Idaho in the early 1990s, even as the areas of greatest timber volume harvested in Idaho shifted in that direction.

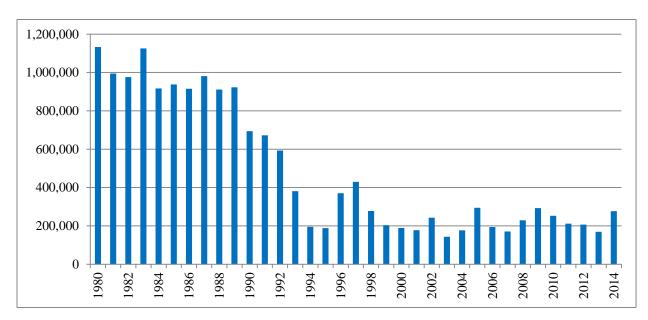


Figure 14. Sold timber volume in board feet for the U.S. Forest Service Region 1 (Headwaters Economics 2015).

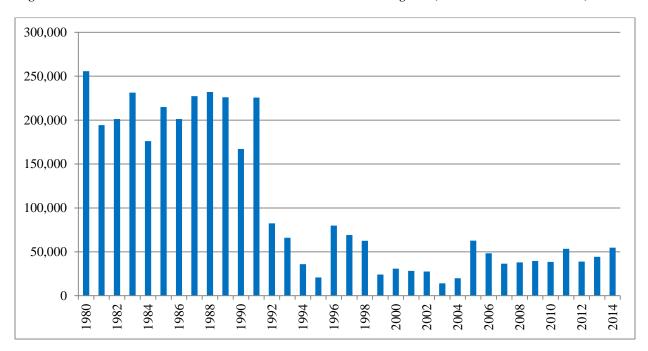


Figure 15. Sold timber volume in board feet for the Nez Perce-Clearwater National Forests (Headwaters Economics 2015).

The diameter of harvested trees in Idaho has been decreasing over time (Simmons et al. 2014). With less volume per tree, more small trees are required to produce the same mill-delivered volume. Small trees produce more logging residue per unit of mill-delivered volume. The growing volume of small trees and the associated unutilized material represents a source of material for the burgeoning woody biomass or biofuels industry and for the pulp and paper industry (Cook et al. 2015; Simmons et al. 2014).

During 2014, housing starts in the U.S. grew by about 9% over 2013 levels and mills throughout North America continued to increase production by bringing recession-idled capacity back into operation (Cook et al. 2015). For many of Idaho's major wood product manufacturers, the gains in U.S. housing and the overall economy since the Great Recession have resulted in some recovery, though the 1.6 billion board feet of lumber production in 2014 in Idaho represented little, if any, gains in production over 2013 levels (Cook et al. 2015).

Timber harvest volumes in Idaho in 2014 were estimated at one billion board feet, representing a 13% decrease over 2013 levels (Cook et al. 2015). During 2014, private lands provided 60% of the timber harvest volume in Idaho, while 29% and 11% came from National Forest System lands (Cook et al. 2015).

4. SIGNIFICANT EVENTS AFFECTING THE PROJECT AREA IN 2014

4.1 THE JOHNSON BAR FIRE

A lightning strike near the Fenn Ranger Station ignited the Johnson Bar Fire on August 3, 2014 (InciWeb 2015). The blaze spread quickly, threatening homes and communities in the Selway corridor and the towns of Lowell and Syringa and prompting evacuations (Clearwater Basin Collaborative 2015). On September 25, fire crews completed a burnout from the top of Lodge Creek down to the Middle Fork of the Clearwater River, which stopped any further spread of the fire toward the town of Syringa (InciWeb 2015). Smoke from the fire and burnout impacted local communities and the highways for several days and was partially responsible for several days of unhealthy air quality in larger communities downwind, including the city of Missoula, Montana (Chaney, 2014). The wildfire and the burnouts associated with the suppression effort left the potential for falling snags along roads and the river corridors (InciWeb 2015). Several roads, campgrounds, and areas that would have been otherwise open to the public were closed during the fire. Precipitation and cooler temperatures at the end of September and early October greatly aided the fire suppression efforts, allowing the crews to contain the majority of the fire (InciWeb 2015).

There were over 650 personnel involved in the suppression efforts, as well as over two dozen fire engines, five helicopters, multiple dozers, over a dozen skidders, multiple excavators, and over a half-dozen feller/bunchers (InciWeb 2015). Three minor injuries were reported (InciWeb 2015). The Incident Command Post was located at the Fenn Ranger Station, while fire camp was located at Johnson Bar Campground (Inciweb 2015). No homes or outbuildings were lost in the fire (Clearwater Basin Collaborative 2015).

In the end, the Johnson Bar Fire burned over 13,000 acres within the CFLRP project area, much of which was being analyzed for a large-scale restoration project to reduce fuel loads and generate local forest products (Clearwater Basin Collaborative 2015). Because of the fire, land managers re-evaluated CFLRP projects and priorities and moved the Lowell Wildland Urban Interface Project to a higher priority (Clearwater Basin Collaborative 2015). According to the Clearwater Basin Collaborative (2015), "This fire illustrates the need for accelerated restoration treatments like those funded through the CFLR program" (Clearwater Basin Collaborative 2015). After the fire, land managers quickly released a proposal to salvage dead and dying trees within the fire's perimeter. This proposal is consistent with CFLRP objectives to use the best available science to restore the structure and composition of forest stands and to use forest restoration byproducts to offset treatment costs while benefitting local rural economies and improving forest health (Clearwater Basin Collaborative 2015).

The Johnson Bar Fire burned very hot in certain areas, leaving little behind but scorched and exposed soils that are now prone to erosion (Clearwater Basin Collaborative 2015). If the restoration project had already been implemented, "it is likely the Johnson Bar Fire could have been quickly extinguished, saving the

⁸ InciWeb. 2015. http://inciweb.nwcg.gov/incident/4068/ (accessed October 28, 2015).

taxpayers \$12 million in fire suppression costs, and the undesired ecological consequences" (Clearwater Basin Collaborative 2015).

4.2 COLLABORATIVE FOREST LANDSCAPE RESTORATION PROGRAM FIVE-YEAR REPORT

In March 2015, the USFS released a five year report on the CFLR Program (USDA Forest Service 2015). What follows is a summary of this report as it relates to the socio-economics of the Selway-Middle Fork CFLRP. The CFLR Program was initiated through the passage of the Title IV of the Omnibus Public Land Management Act of 2009. Part of the purpose of Title IV is to: (1) support ecological, economic, and social sustainability; (2) facilitate the reduction of wildfire management costs and risks, including through reestablishing natural fire regimes; and (3) use forest restoration byproducts to offset treatment costs while benefiting local rural economies and improving forest health. Landscapes were selected for this program in-part by the accessibility for woody biomass utilization and the strength of the Collaborative's investments and funding plans.

The five-year report claims that the CFLRP is on track to meet its 10-year goals. Thus far, the CFLRP has generated more than 1,256 million sold board feet of timber, \$661 million in local labor income, and has supported on average 4,360 jobs per year. Additionally, CFLRP projects have leveraged more than \$76.1 million in partner matching funds.

At the time of the five year CFLRP report, 23 CFLR programs have been funded nationwide, 10 in 2010, 10 more in 2012, and 3 more in 2013. The Selway-Middle Fork CFLRP was first funded in 2010.

Dollars invested in forest and watershed restoration have been shown to double their value in economic impacts as those dollars flow through the community (Nielsen-Pincus and Moseley 2010). CFLRP dollars invested in forest restoration have direct impacts in the form of local wages and purchasing. The 2015 CFLRP five year report says that, "every \$1 million spent on restoration activities generates 15 to 24 local jobs, comparable to the construction and infrastructure sectors" (p. 5). Those hired to get the work done also generate indirect impacts by spending a portion of their salaries on goods and services in the local community. Those businesses providing goods and services to the workers then spend and invest locally, creating an induced impact. Healthy forests and improved infrastructure generates and provides access to more ecosystem services, which benefit users at the local, regional, and national scale.

While substantial, the investments of CFLRP funds have not been enough to overcome the hurdles caused by a lack of local markets and infrastructure for forest products in some CFLRP project areas.

4.3 THE AGRICULTURE ACT OF 2014

The Agriculture Act of 2014, also known as the 2014 Farm Bill, authorizes nutrition and agricultural programs in the U.S. for the years 2014 through 2018. The bill authorizes \$956 million in spending over the next ten years. The bill passed the U.S. House of Representatives on January 29, 2014 and the Senate on February 4, 2014. President Obama signed the bill into law on February 7, 2014. The bill is generally

⁹ It should be noted that, where the fire did not burn as hot, there were likely some ecological benefits associated with this fire.

considered two years late, since farm bills are traditionally passed every five years and the previous farm bill, the Food, Conservation, and Energy Act of 2008, expired in 2012.

The 2014 Farm Bill permanently reauthorizes stewardship contracting¹⁰ and extends the Good Neighbor Authority¹¹ nationwide and onto BLM lands. It also authorizes the designation of treatment areas within the National Forest System due to insect or disease infestation and allows for expedited project planning within those designated areas through the Collaborative Restoration Project program. The 2014 Farm Bill also modifies the existing public notice, comment, and appeals process for land and resource management plans. "Issues from this and previous farm bills may also become of interest again in the future, such as assisting forest-dependent communities in diversifying their economies or providing payments for ecosystem services" (Hoover 2014).

Section 603, subsection (b), Collaborative Restoration Project of the Agriculture Act of 2014 is most relevant to this socio-economic report. This subsection sanctions collaborative forest restoration projects on National Forest System lands. The purpose of Collaborative Restoration Projects is to carry out forest restoration treatments that maximize the retention of old-growth and large trees, as appropriate for the forest type, to the extent that the trees promote stands that are resilient to insects and disease. In planning Collaborative Restoration Projects, the best available scientific information must be considered in order to maintain or restore ecological integrity, including maintaining or restoring structure, function, composition, and connectivity. The projects are to be developed and implemented through a collaborative process that includes multiple interested persons representing diverse interests and is transparent and nonexclusive. Alternatively, the planning program can meet the requirements for a resource advisory committee under subsections (c) through (f) of section 205 of the Secure Rural Schools and Community Self-Determination Act of 2000 (16 U.S.C. 7125). A project carried out under Sec. 603, subsection (b) of this farm bill may carry out part of a proposal that complies with the eligibility requirements of the Collaborative Forest Landscape Restoration Program under section 4003(b) of the Omnibus Public Land Management Act of 2009 (16 U.S.C. 7303(b)).

Projects within the Collaborative Restoration Project may not exceed 3,000 acres and are limited to areas in the WUI or to areas in Condition Classes¹² 2 or 3 in Fire Regime Groups¹³ I, II, or III outside the WUI. The projects carried out under this section are to be consistent with the area's land and resource management plan. Public notice and scoping need to be carried out for any action or project proposed as a Collaborative Restoration Project.

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¹⁰ Stewardship contracting seeks "to promote a closer working relationship with local communities in a broad range of activities that improve land conditions. These projects shift the focus of federal forest and rangeland management toward a desired future resource condition. They are also a means for federal agencies to contribute to the development of sustainable rural communities, restore and maintain healthy forest ecosystems, and provide a continuing source of local income and employment" (U.S. Forest Service 2015(c)).

¹¹ The Good Neighbor Authority allows the U.S. Forest Service to enter into cooperative agreements or contracts with states to allow states to perform watershed restoration and forest management services on National Forest System lands. The 2014 Farm Bill expands this authority to BLM lands and to all 50 states.

¹² Condition Class 2 forests have a moderate departure from their fire regime, while Condition Class 3 forests have a high departure from their fire regime.

¹³ Fire Regime Group I has a fire return interval less than or equal to 35 years and typically has low and mixed severity fires. Fire Regime Group II has the same fire return interval as Group I, but typically has stand replacing fires. Fire Regime Group III has a fire return interval of 35 to 200 years with low to mixed severity fires.

The Biomass Crop Assistance Program was authorized under the 2014 Farm Bill and was used this year within the Selway-Middle Fork CFLRP for the Lodge Point Stewardship Project.

5. METHODOLOGY

The updated status of each of the methodologies is provided below for 2014. For example, the progress on the Risk and Cost Analysis Tools Package (R-CAT) is described and changes to the Treatment for Restoration Economic Analysis Tool (TREAT) have been detailed. Also, changes to discussion forms and how discussants were identified are described below.

5.1 2011 CFLRP OUTCOMES AND INDICATORS

In 2011, the National Forest Foundation partnered with CFLRP collaboratives to develop five national indicators to be reported in each program's five year report. Those five indicators include: (1) economic impacts, (2) fire risk and costs, (3) ecological conditions, (4) collaboration, and (5) leveraged funds. These indicators are designed to tell a national story about the CFLR program, to measure outcomes across projects, to encourage regular collection and reporting of data, and to provide a course-scale picture of the impacts of the CFLR Program. These indicators form the basis for this report.

5.2 DATA COLLECTION

Both primary and secondary data were used to complete this analysis. The secondary data included Bureau of Labor Statistics data, Headwaters Economics timber data, USFS contracts and agreements data, USFS TREAT data, U.S. Census Bureau data, and information about R-CAT. The collection of primary discussion data followed similar methodology from the prior year.

5.2.1 Design of Discussion Questions

Discussions for this monitoring period were primarily focused on identifying direct and indirect impacts. The discussion forms were utilized primarily with non-local and local contractors. The focus of these discussions was on the purchase of materials and supplies, hiring of workers and subcontractors, and time spent in the communities closest to the project area. The discussions with agreement partners were focused on the impact of CFLRP funds on the group's programs and on the community.

5.2.2 Identification of Discussants

Discussants were identified according to their anticipated contribution to indirect impacts from CFLRP funds. The contractors, both local and non-local, were identified based on amount of the contract, with higher value contracts called first.

5.3 Types and Sources of Funds

There are several types of funds associated with the CFLRP: matching, partner, leverage, USFS, contracts, and agreements. A clear understanding of these funds is essential in order to measure and monitor the impacts of the program funds. The TREAT program uses only the funds that are obligated through USFS contracts or agreements. Funds that other organizations contribute are either matching funds or leveraged funds. Matching funds are a requirement of the program and are included in the TREAT program's measures of impacts of all CFLRP funds. Leveraged funds are those funds or in-kind services that help the project achieve objectives as outlined in their proposal within the defined landscape, but do not meet the qualifications for match (U.S.D.A.Forest Service 2015a). Matching funds include USFS appropriated

funds, partnership funds, and partnership in-kind services. An important component of the CFLRP is attracting partnerships and resources to accomplish work across all ownerships. Generally speaking, "matching" funds are spent on the federal ownership, while "leveraged" funds are generally funds spent on private lands. This enables individual projects that cross the borders of the project area to achieve restoration goals.

5.4 TREAT

The new version of TREAT was used to analyze the economic impact of the Selway-Middle Fork CFLRP in 2014. TREAT requires the user to input information on the distribution of funds spent, the distribution of the timber volume by product, and the percentage of funding that left the local area. The distribution of funds spent is important for determining indirect impacts, as each job type produces different levels of indirect impacts (U.S.D.A.Forest Service 2015a).

5.5 ESTIMATING REDUCTIONS IN FIRE COSTS

The R-CAT was assembled by the USDA Forest Service to analyze the effectiveness of CFLRP funds in meeting the goals of: (1) facilitating the reduction of wildfire management costs, including through reestablishing natural fire regimes and reducing the risk of uncharacteristic wildfire; (2) affecting wildfire activity and management costs; and (3) using forest restoration byproducts to offset treatment costs while benefiting local rural economies and improving forest health. The USDA Forest Service R-CAT User's Guide (2010) provides the following rationale for developing R-CAT:

Analyses to verify the potential for attainment of these purposes and objectives can be met through a combination of cutting edge fire and economics modeling and reporting. However, to meet the wildfire management cost reporting requirements described in Title IV, spatially explicit treatment schedules for each strategy, with at least a coarse estimate of projected implementation timing and costs are mandatory. (p. 1)

In 2014, 12 of the 23 CFLRP projects reported to the Forest Service that they were struggling with the R-CAT process. The Forest Service maintains that the tool is still useful for helping CFLRPs to "tell our story" to Congress regarding the impact that treatments are having as they relate to suppression costs. For the Selway-Middle Fork CFLRP, the Johnson Bar Fire that occurred in 2014 burned through many of the areas that were slated for treatment. Due to this fire and staffing issues, the Forest Service has suspended the implementation of the R-CAT process in the Selway-Middle Fork CFLRP. According to Mike Ward with the Forest Service, "The upshot is that [the Johnson Bar Fire] will tell a very powerful story, and we plan on really examining the forgone opportunities, fire costs, [and] ecological effects" (Ward 2015).

5.6 DATA ANALYSIS

Due to the small sample sizes, the economic impact data do not lend themselves to statistical analysis. It is also not possible to correlate the jobs produced by TREAT with the secondary employment data. This is due to the nature of the TREAT program and again the relatively small sample size. The best method of analysis is to draw themes from the discussions held with those associated with the project. Using this method, general statements can be gathered about the impact that the project has had on the local area. It is important to keep in mind the small size of the communities within the project area. In some cases, the addition of one to ten jobs can make a substantial impact on small rural communities. One of the primary

purposes of conducting annual monitoring in addition to TREAT is to provide the qualitative data, or storbehind the TREAT analysis.	•

6. SUMMARY OF IMPACTS FROM PREVIOUS YEARS

This section contains a description of the data for the previous years. This information is helpful for setting the context within which the 2014 impacts are viewed.

6.1 ECONOMIC IMPACTS

Table 3 contains information on contracts awarded utilizing CFLRP funds from 2011 through the 2013 calendar year. Contracts were awarded to 33 contractors, 8 of which were local contractors in the TREAT economic impact area. There were 47 contracts awarded, 15 of which were awarded to local contractors. CFLRP funds distributed in the local area to contractors for 2011 through 2013 were over \$2.37 million.

There were 25 non-local contractors that received contracts between 2011 and 2013. They received 32 contracts over this time period. The non-local contractors were awarded about \$1.25 million in CFLRP funds.

Between 2011 and 2013, over \$3.62 million in CFLRP funds was invested in restoration work in the Selway-Middle Fork CFLRP area. About 34% of the total funds were used by non-local contractors to perform work in the project area, with about 66% going to local contractors. The geographic distribution of contract funds is important for calculating the local economic impact of CFLRP funds.

Table 3. CFLRP funds awarded to contractors in 2011 through 2013.

	Number of Contractors	Number of Contracts	Amount of CFLRP Funds
Non-local	25	32	\$1,246,475
Local	8	15	\$2,373,916
Total	33	47	\$3,620,391

In 2013, 64% of the contract funds spent were for facilities and facilities was the largest sum to go to non-local contractors (Table 4). In 2012 and 2011, the greatest sum to go to non-local contractors was for ecosystem restoration. Road decommissioning work received the largest sum for work by local contractors for 2013; this is consistent with the results from 2012 and 2011 (Table 5 and Table 6, respectively). While the amount awarded for decommissioning and other road work decreased precipitously from 2012, several of the projects from previous years were still being completed in 2013.

Table 4. Distribution of CFLRP funds to other project activities, 2013.

	Primary Impact Area	Secondary Impact Area	Total Local	Total Non- Local
Facilities, Watershed, Roads and Trails				
Decommissioning & Other Road Work	\$100,849		\$100,849	\$38,667
Trail Maintenance	\$6,804	\$14,405	\$21,209	\$21,617
Culverts				\$99,297
Facilities		\$9,840	\$9,840	\$438,454
Slide Repairs		\$20,253	\$20,253	
Ecosystem Restoration, Hazardous Fuels, and Forest Health				\$103,620

	Primary Impact Area	Secondary Impact Area	Total Local	Total Non- Local
Commercial Firewood				
Contracted Monitoring				
Total	\$107,653	\$44,498	\$152,151	\$701,656

CFLRP funds distributed to local contractors for road decommissioning and other road work was notable in 2012, as was the resulting total distribution of funds locally (Table 5). This was the only year between 2011 and 2013 that local distributions were higher than non-local and they were high enough to make local distributions higher than non-local across the three year period.

Table 5. Distribution of CFLRP Funds to other project activities, 2012.

	Primary Impact Area	Secondary Impact Area	Total Local	Non- Local
Facilities, Watershed, Roads and Trails				
Decommissioning & Other Road Work	\$387,132	\$440,777	\$827,909	
Trail Maintenance	\$6,408	\$1,366	\$7,774	\$11,119
Culverts	\$139,608			
Facilities		\$85,903	\$85,903	
Slide Repairs				
Ecosystem Restoration, Hazardous Fuels, and Forest Health		\$1,047		\$140,450
Commercial Firewood				
Contracted Monitoring		\$52,217		\$69,877
Total	\$533,148	\$581,310	\$921,586	\$221,446

Contract fund distributions in 2011 were notable for the amount spent locally on slide repairs and for the lack of any contracts for facilities and trail maintenance (Table 6).

Table 6. Distribution of contract funds to other project activities, 2011.

	Primary Impact Area	Secondary Impact Area	Total Local	Non- Local
Facilities, Watershed, Roads and Trails				
Decommissioning	\$355,377		\$355,377	
Trail Maintenance				
Culverts	\$75,000	\$114,189	\$189,189	
Facilities				
Slide Repairs	\$574,365	\$20,995	\$595,360	
Ecosystem Restoration, Hazardous Fuels, and Forest Health	\$88,485	\$71,768	\$160,253	\$188,373
Commercial Firewood				
Contracted Monitoring				\$135,000
Total	\$1,093,227	\$206,952	\$1,300,179	\$323,373

An overview of the TREAT results for 2010 through 2013 are presented in Table 7. The results produced by TREAT are based on the funding awarded and obligated during the project year. Most projects, both with contractors and agreement partners, span several years. Therefore, the TREAT results should be used more as a guideline for project impacts projected during the proposal of restoration activities.

Table 7. Overview of the impact of CFLRP supported forestry activities on jobs, 2010 through 2013 (TREAT).

	2010	2011	2012	2013
Commercial Forest Product Activities				
Direct Jobs	20.3	36.8	24.2	33.5
Indirect and Induced Jobs	19.6	43.0	28.3	37.3
Total Commercial Forest Products Activities	39.9	79.8	52.5	70.7
Other Project Activities				
Direct Jobs	47.6	69.4	60.0	93.9
Indirect and Induced Jobs	20.4	14.0	14.3	28.2
Total Other Project Activities	68.0	83.4	74.3	122.0
Total Jobs	107.9	163.2	126.8	192.8

Table 8 shows greater detail of how CFLRP funds impacted jobs in the project area during 2013.

Table 8. Details of the impact of CFLRP supported forestry activities on jobs, 2010 through 2013 (TREAT).

	2013 Employment (Part-time and Full-time Jobs)		
Job Type	Direct	Indirect and Induced	Total
Commercial Forest Products			
Logging	13.7	7.5	21.2
Sawmills	16.7	24.9	41.6

	2013 Employment (Part-time and Full-time Jobs)		
Job Type	Direct	Indirect and Induced	Total
Mills Processing Roundwood/Pulp Wood	0	0	0
Facilities Processing Sawmill Residue	3.1	4.8	8
Total	33.5	37.3	70.7
Other Project Activities			
Facilities, Watershed, Roads, and Trails	11.7	11.8	23.5
Ecosystem Restoration, Hazardous Fuels, and Forest Health	46.6	6.2	52.9
Thinning and Biomass			
Contract Monitoring	3.3	1.3	4.6
FS Implementation and Monitoring	32.3	8.8	41.1
Total	93.9	28.2	122
Total All Inputs	127.3	65.5	192.8

Table 9 shows the types and sources of funds distributed for work in the project area during 2010 through 2013. It is noteworthy that over \$16.5 million has gone towards restoration efforts associated with the Selway-Middle Fork CFLR Program between 2010 and 2013 and that about \$12.2 million of that was directly through CFLRP funds awarded.

Table 9. The types and sources of funds for CFLRP work done in the project area, 2010 through 2013.

Type of Fund	2010	2011	2012	2013
Program Award	\$1,000,000	\$3,400,000	\$4,000,000	\$3,760,000
Obligated Funds	\$998,125	\$3,030,467	\$2,778,394	\$2,310,204
Partner in Kind Contributions	\$1,048,920	\$1,250,019	\$1,218,629	\$1,314,865
Partner Contributions through Agreements	\$374,700	\$584,400	\$397,659	\$671,157
Forest Service Matching Funds	\$545,049	\$1,595,149	\$1,574,127	\$1,651,418
Leveraged Funds	\$0	\$0	\$401,450	\$149,124 ¹⁴
Total for Use in TREAT All Funds Analysis	\$2,592,094	\$5,875,635	\$5,968,809	\$5,947,644 ¹⁵

6.2 FOREST PRODUCTS INDUSTRY

The amount of timber produced by the project area in 2013 (7,424.5 hundred cubic feet (CCF)) was a small percentage of the total timber produced in the Clearwater Basin and a small percentage of the amount

¹⁴ This amount includes \$137,124 from Idaho County's Fire Mitigation and \$12,000 from Montana Conservation Corps. It does not include the other two amounts listed in the Annual Report for the Clear Creek Project. The \$230,000 in grant funds were listed as pending and the \$748,000 was listed as matching and leveraged funds over the next three years.

¹⁵ The amount actually used in the TREAT all funds calculations was \$6,941,251. It is unclear how this number was obtained.

anticipated from the project area in future years (U.S.D.A.Forest Service 2014). A small part of the timber from the project area went to small mills for post and pole, but the vast majority went to sawmills and papermills.

There was very little timber volume produced in the project area in 2013 as a result of a strategic decision made by the Forests to pursue additional consultation on a project decision. The project was appealed and the decision subsequently affirmed by the appeal deciding officer and was not litigated.

During 2013, two different loggers worked within the project area, both contracted by local mills. One was located within the TREAT economic impact area and the other was from Oregon. Local truck companies were used for hauling. Both loggers spent substantial time in the project area spending money for lodging, meals, and supplies.

6.3 FORMAL JOB TRAINING AND ON-THE-JOB TRAINING

Three programs provided substantial training opportunities in 2013:

- The Idaho Youth Conservation Corps program provided education and local work opportunity for 13 local youth (U.S.D.A.Forest Service 2014).
- The CBC initiated a four week paid Youth Program that provided work projects and instruction for 6 local youth.
- The Montana Conservation Corps provided three and a half months of training to their crew leaders prior to the summer work season.

7. SOCIO-ECONOMIC IMPACTS IN 2014

7.1 CFLRP FUNDED CONTRACTS FOR 2014

The Selway-Middle Fork CFLRP Annual Report for 2014 (2015b) reported that, at times, local contractors do not have the capacity to perform the restoration work put out for contract with CFLRP funds. Therefore, some contracts are awarded outside the local area. Growing the pool of available contractors is part of the purpose of the CBC's Monitoring Advisory Committee.

In 2014 there were 19 contracts awarded for a total of \$1,075,002 in CFLRP funds; 17 of them were local contracts and two were non-local (Table 10). There were 11 local contractors awarded with contracts funded by CFLRP funds and two non-local contractors. For 2014, 88% of the awarded CFLRP funds went to local contractors and 12% went to non-local contractors.

Table 10. Distribution of CFLRP funds to contractors in 2014.

	Total Local	Non-local
Contractors	11	2
Contracts	17	2
Total Contract Amount	\$950,647	\$124,355

Table 11 shows the distribution of CFLRP funds by project activity for 2014. Road work, including culvert repair and replacement, slide repair, and bridge installation made up the bulk of the CFLRP funds in contracting. All of the ecosystem restoration dollars went toward work restoring a pond at Fenn Ranger Station.

Table 11. Distribution of contract CFLRP funds to other project activities, 2014.

	Total Local	Non-Local
Facilities, Watershed, Roads and Trails		
Decommissioning & Other Road Work	\$389,502	\$119,495
Trail Maintenance	\$16,684	\$4,860
Culverts	\$147,695	
Facilities		
Slide Repairs	\$217,739	
Ecosystem Restoration, Hazardous Fuels, and Forest Health Commercial Firewood	\$179,027	
Contracted Monitoring		
Total	\$950,647	\$124,355

7.2 CFLRP FUNDED AGREEMENTS FOR 2014

Table 12 shows the distribution of CFLRP agreement funds and other agreement distributions for 2014. The Forest Service obligated amount equates to the distribution of CFLRP agreement funds. Forest Service non-cash contributions are goods and services leveraged toward the project. Cooperator cash amounts are the funds leveraged toward the project by the agreement partner, separate from any obligated dollars received. Cooperator non-cash are goods and services leveraged toward the project by the agreement partner. In total, \$1.6 million in agreement funds went toward CFLRP projects in 2014; about 65% of the total agreement funds for 2014 were CFLRP agreement funds; about 8% were Forest Service in-kind contributions; about 15% were agreement partner cash contributions; and about 12% came from agreement partner in-kind contributions. It is notable that monitoring and trail maintenance make up the majority of project activities for CFLRP agreements.

Table 12. CFLRP and other agreement distributions for 2014.

Project	Forest Service Obligated Amount	Forest Service Non-cash	Cooperator Cash Amount	Cooperator Non-cash
Monitoring	\$517,800	\$10,364	\$6,052	\$131,497
Trail Maintenance	\$315,300	\$73,145	\$189,017	\$26,817
Trail Liaison	\$82,500	\$19,338	\$23,813	\$2,952
Weed Inventory and Treatment	\$56,000	\$15,894	\$0	\$18,921
Wildlife Habitat Restoration	\$20,000	\$2,712	\$0	\$7,200
Elk Forage Surveys	\$2,000	\$667	\$2,997	\$0
Sheep Creek	\$18,000	\$3,121	\$14,697	\$1,695
O'Hara Road 651	\$30,000	\$1,644	\$0	\$9,050
Total	\$1,041,600	\$126,885	\$236,576	\$198,132

7.3 ECONOMIC IMPACTS OF CFLRP FUNDS IN 2014

Table 13 shows the outputs from the Forest Service's TREAT analysis for the impact of CFLRP funds on employment in 2014. CFLRP funds directly supported 111 jobs in 2014. Through local spending of CFLRP funds, both direct spending and from the spending of CFLRP derived wages, the 2014 CFLRP funds indirectly supported and induced 40.7 jobs. About 37% of the total full and part-time jobs directly and indirectly created by CFLRP funds were associated with commercial forest product activities. The remainder, 63%, were in other project activities such as road work and trail maintenance.

Table 13. Direct, indirect, and induced jobs through CFLRP funds in the project area for 2014 (TREAT).

Direct and Indirect Jobs	2014
Commercial Forest Product Activities	
Direct Jobs	26.9
Indirect Jobs	29
Total Commercial Forest Product Activities	56

Direct and Indirect Jobs	2014
Other Project Activities	
Direct Jobs	83.8
Indirect and Induced Jobs	11.7
Total Other Project Activities	95.3
Total Jobs	151.3

Table 14 shows the types of employment opportunities supported by CFLRP funds in 2014. Amongst the commercial forest products industry, CFLRP funds had the largest impact on sawmill jobs, followed by logging jobs in 2014. No commercial forest product jobs in processing sawmill residue were supported through CFLRP funds in 2014. Forest Service jobs in implementation and monitoring had the most jobs supported by CFLRP funds in 2014, making up 26% of the total jobs supported by CFLRP funds.

Table 14. Jobs by Type for 2014 (TREAT).

	2014				
	Employment(Number of Part and Full-time Jobs)				
		Indirect and			
Job Type	Direct	Induced	Total		
Commercial Forest Products					
Logging	10.5	6.1	16.6		
Sawmills	11.6	14.1	25.7		
Mills Processing Roundwood/Pulp Wood	4.2	7.9	12.1		
Facilities Processing Sawmill Residue					
Other Timber Products	0.6	0.7	1.4		
Total	26.9	29	56		
Other Project Activities					
Equipment Intensive	10.4	0.2	10.6		
Labor Intensive	12.8	1.4	14.1		
Material Intensive	16.4	3.8	19.9		
Technical Services	3.1	1.7	4.8		
Professional Services	3.7	1.5	5.2		
Contract Monitoring	1.2	0.5	1.7		
FS Implementation and Monitoring	36.6	9	39.3		
Total of Other Project Activities	83.8	11.7	95.3		
Total All Inputs	110.7	40.7	151.3		

7.4 CFLRP IMPACTS ON THE FOREST PRODUCTS INDUSTRY FOR 2014

In 2013, Region One of the Forest Service, which includes the project area, sold 169,305 million board feet of timber. In 2014, they sold 276,686 million board feet, representing a 63% increase over 2013. The sold value of timber in Region 1 for 2014 was about \$46.5 million. The Nez Perce-Clearwater National Forests

sold 44,402 million board feet of timber in 2013. In 2014, they sold 54,761 million board feet, representing a 23% increase over 2013 levels. The sold value of timber coming off of Nez Perce National Forest in 2014 was about \$5 million. In 2014, the Nez Perce-Clearwater National Forests sold about 20% of the timber in the Region 1 total by volume and 11% by sold value (Headwaters Economics 2015).

In 2014, the Iron Mountain Stewardship Project was sold to Blue North Forest Products in Kamiah, Idaho. The Selway-Middle Fork CFLRP Annual Report for 2014 (2015b) states that, while just over 400 acres in size, the Iron Mountain Stewardship Project will yield great ecologic, social, and economic benefit to the community of Elk City. The project sold for over \$960,000.

The Lodge Point Stewardship Project, sold to Idaho Forest Group, continued towards completion in 2014. This project is thinning fuels in the Lowell, Syringa, and Big Cedar's WUI and qualified for the Biomass Crop Assistance Program in 2014. The Interface Stewardship Project, purchased by Blue North Forest Products was completed in 2014, which reduced fuels in the wildland urban interface areas over Lowell, Syringa, and Big Cedar.

In 2014, the Forest Service had two active projects harvesting forest products and performing restoration work within the project area. The receipts from these projects will be used to fund additional restoration work across the Nez Perce-Clearwater National Forests (U.S.D.A.Forest Service 2015b). For 2014, 952.8 CCF were harvested, 269 acres of forest were treated using timber sales, and 14,659.1 CCF of timber were sold. There were 860.1 green tons of small diameter trees removed and available for bio-energy production (U.S.D.A.Forest Service 2015b).

7.5 CFLRP IMPACTS ON REDUCTIONS IN WILDFIRE COSTS FOR 2014

The project area had 71 wildland fires in 2014; 52 were managed with a suppression strategy and accounted for approximately 16,822 acres burned (U.S.D.A.Forest Service 2015b). The remaining 19 fires were managed to achieve resource objectives and covered 665 acres by the end of fiscal year 2014. Approximately 65% of those acres were moved towards a more desirable condition regarding forest health and fuels reduction. The remaining 35% of acres burned helped to maintain existing desirable conditions. An additional 6500 acres of burned area that were achieving resource objectives burned in October, 2014, after the end of the fiscal year (U.S.D.A.Forest Service 2015b). Greater detail on how resource objectives were met will be reported in the Baseline Data for Previous Year's Impact section of the 2015 Selway-Middle Fork CFLRP Socioeconomic Report.

Due to location and duration of the Johnson Bar Fire in 2014, no prescribed fire projects were completed in the project area, however, preparatory work was completed on the Fenn Face prescribed burn project in anticipation of a 2015 burn (U.S.D.A.Forest Service 2015b). Currently the Forest Service has 5,000 acres prepared for the implementation of prescribed fire within the project area.

Other wildfire mitigation efforts in 2014 included 176.1 acres of fuels reduction on private lands by the Idaho County Wildfire Mitigation Department. The Department spent an estimated \$234,435 to accomplish the work. In-kind contributions from Idaho County to complete this work totaled an estimated \$18,000.

7.6 CFLRP IMPACTS ON FORMAL JOB TRAINING AND ON-THE-JOB TRAINING

In 2014, on the heels of successful implementation in 2013, the CBC partnered with the Nez Perce-Clearwater National Forests, the Idaho Department of Labor, and Framing Our Community to offer an eight week paid youth work program called the Clearwater Basin Youth Conservation Corps (CBYCC). The program was funded with \$113,133 of CFLRP agreement funds. The benefits of these programs are to train and retain skilled forest workers, managers, and leaders in the project area. Necessary line-items to provide these services included strategic development, program development and oversight, insurance costs, youth wages, instructor wages, travel expenses, crew leader wages, equipment, and outreach. Due to the greater program capacity needs of the CBYCC, a Youth Council subcommittee within the Monitoring Advisory Committee has been created (U.S.D.A.Forest Service 2015b). In 2015 the CBYCC hopes to expand to reach other communities and possibly expand to include veterans or college students.

Also providing formalized training opportunities for forest workers, Montana Conservation Corps (MCC) uses CFLRP funds to provide trail maintenance services within the project area using AmeriCorps recruits. The Selway Bitterroot-Frank Church Foundation (SBFCF) recruits interns every year and provides them with entry level on-the-job training opportunities in wilderness work. MCC and SBFCF act as "farm teams" for forestry field workers and wilderness field workers.

Many other businesses and organizations provide on-the-job training in forest restoration work. For 2014, discussants reported providing on-the-job training in weed management, heavy equipment operation, and restoration construction work.

The Selway-Middle Fork CFLRP Annual Report for 2014 (U.S.D.A.Forest Service 2015b) states that the MAC, Idaho Department of Labor, and other local economic development groups have begun making plans to host a training to assist contractors with the process of signing up for federal contracting. Contractors have suggested that the process is a barrier to their ability to provide the CFLRP with restoration services.

7.7 RESULTS FROM DISCUSSIONS WITH CONTRACTORS AND AGREEMENT PARTNERS

In 2014, discussions were held with five agreement partners, three non-local contractors, and five local contractors. These discussions provided excellent context for how CFLRP funds impact the local and regional communities by supporting employment opportunities, local spending, and induced economic effects. This year each discussant was asked if the work they were paid to do with CFLRP funds was interrupted by the Johnson Bar Fire; no one reported that it was.

7.7.1 Discussion highlights with Agreement Partners

The Selway Bitterroot-Frank Church Foundation recruits interns every year and gets these interns with the help of the CBC. They provide essential, entry level, on-the-job training opportunities for youth interested in wilderness and Forest Service work. They tell the Idaho County Commissioners every year that they bring young people into these communities and ask them to be community members for the summer. The biggest impact of the CFLRP funds on the work that they do is connecting youth to the

surrounding communities in wilderness stewardship. They act as a kind of "farm team" for wilderness workers.

Montana Conservation Corps uses CFLRP funds to provide trail maintenance services within the project area. MCC is staffed by AmeriCorps recruits, where diversity is a big initiative. MCC currently has a full-time staff person to help support this diversity initiative. MCC uses CFLRP funds to help agencies meet their trail maintenance targets. Their niche is to cost effectively send crews into remote locations for long periods of time. It is hard for the agencies to get that kind of remote work done.

Framing our Community used CFLRP funds to hire four crews in 2014 for the Clearwater Basin Youth Conservation Corps. The Youth Corps provides job training opportunities for young people in the Clearwater Basin, many of which come from low income communities. The CBC was the catalyst that has made the Youth Corps happen, partially using a model developed by the Forest Service that had been used by Framing our Community in the past. Framing our Community is a contractor hired by the CBC through the Clearwater Resource Conservation and Development Council (CRCDC) to help implement the Youth Corps program under their direction. Many partners, including Framing our Community, the CBC, the Clearwater Resource Conservation and Development Council, and Idaho Department of Labor provided matching funds for this program. Framing our Community has involved the local communities in local forest management. They have been a factor in helping to change the negative impact of the 'timber wars', which was politically polarizing locally. The Youth Corps also gives these communities some hope of being able to give their children fulfilling careers in the Clearwater Basin. As part of their contract with the CBC, Framing our Community hired two people in the local area to help with some water quality improvement projects.

CRCDC is the fiscal sponsor for funding that comes through to do restoration work in the Clearwater Basin. They handle the money, perform the audits, do the payroll, generate reports, and do the billing under a 10% administration fee. The CDRDC finds the stability of the CFLRP funding to be very important for being able to get good restoration work done in the Basin.

The Great Burn Study Group (GBSG) used CFLRP funds in 2014 to treat noxious weeds in Kelly Creek with the cooperation of the University of Montana. They have been doing this work for ten years now with youth field crews on five, 10 day hitches each summer. The result of these activities has been to dramatically decrease the weed infestations in a basin with a blue ribbon trout stream. The Backcountry Horsemen subcontract with the GBSG to pack the crews in. They get paid for their time on the way in and donate their services on the way out.

7.7.2 Discussions with Non-local Contractors

Lee VanderWater uses CFLRP funds to do trail work in the lower Lochsa River area, covering pretty much all of the trails on the south face of the Lochsa River, from Mocus Point on down. Growing up, Lee spent summers in the Clearwater Basin. His parents cleared trails under contract and worked in lookouts. Lee and his parents lived in New York State the rest of the time. Lee is actually a local contractor; his bank is in Albuquerque and the Forest Service has him listed as living there, but he lives in Missoula, where he works winters and summers at the Missoula Community Food Co-op, providing access to all income levels to high quality, locally produced food.

Carl Davis of Davis Resources, based in Manson, Washington, uses CFLRP funds to do trail work in the Elk Summit area. He clears 40 to 60 miles of trails in a summer. Carl is a retired Forest Service employee. He worked in Region 1 for about half of his career, during which time he gained some knowledge of the Powell Ranger District, where he now clears trails. When the Davis Resources crew is clearing trails, they usually work six to eight day hitches then stay at the Lochsa Lodge for a day or two before going back in on another hitch. Carl asked that a concern of his be passed along in this report, "The policy to let Wilderness fires burn makes sense in terms of lower fire costs, but please recognize the effect that fires have on trails. Trails become impassible for years after these fires, resulting in less and less use of those areas for recreation."

Allied Engineering Services, based in Bozeman, Montana, performed some preliminary scoping on ten sites in the project area in 2014. The scoping was for road repairs and slope failures. Allied Engineering has performed other work in the Clearwater Basin, though they are unaware of the funding mechanisms for the work they have performed. To perform their work in 2014 they stayed in Syringa on two trips, one for three nights for four people, the other for two nights and three people.

7.7.3 Discussions with Local Contractors

Cook and Sons Construction installed a bridge, constructed a bypass ditch, installed culverts, drained and dredged a pond at Fenn Ranger Station, graded roads, and put down magnesium chloride on roads with CFLRP funds in 2014. CFLRP funds were used to support the employment of eight individuals with health insurance benefits. The work required about 1,000 person hours. They used a crane, two excavators, a grader, dump trucks, dozers, a water truck, a roller, and two trucks to perform the work. They recently added a couple new rigs to their fleet. While there was no formal on-the-job training offered under these contracts, their crews certainly gained experience performing this kind of work. The magnesium chloride used for dust abatement by Cook and Sons Construction was purchased in Washington. Cook and Sons Construction has performed quite a few jobs in the project area for the Forest Service, though they are unaware of the funding mechanisms for those other projects.

A. Williams and Sons, LLC used CFLRP funds in 2014 to replace small, semi-damaged culverts with a nine foot diameter culvert. They set the culvert up to simulate a stream bed using retaining walls. The work required about 300 person hours to complete. Two excavators, a wheel loader, and a dump truck were used. The one employee on the job gained experience in the construction of retaining walls. A. Williams and Sons, LLC subcontracted with a firm to haul in extra materials. The firm was located in Idaho County and the subcontracted amount was less than \$5,000. A. Williams and Sons, LLC was aware of at least one other culvert job and one road decommissioning project that they worked on within the Basin using CFLRP funds. They purchased the culvert in Spokane, the geotextile in Coeur d'Alene, materials for the walls were purchased from California, and the rock and dirt were provided locally by the government.

Flash Excavation used CFLRP funds in 2014 to install 13 to 15 gates on roads, mainly within Clear Creek and to replace culverts. Three people worked on these projects, putting in a total of about 250 person hours into the project. A 12 yard dump truck, 28,000 pound excavator, bobcat, and road grader were used to complete the work. Both employees received valuable experience performing the work. The construction of the gates was subcontracted out to a firm in Grangeville, Idaho for about \$11,000. The culverts were purchased in Missoula. Flash Excavation was not sure how many contracts they had worked on that were

financed by CFLRP funds, but they estimated around four projects. They said they haven't noticed that CFLRP projects are much different from the other work they do.

Bear Creek Outfitters performed annual trail maintenance in the Selway-Bitterroot Wilderness using CFLRP funds in 2014. Funds supported three positions and provided about 600 person hours of work clearing trail. Hand tools and stock were used. Bear Creek Outfitters has performed this work for the last five or six years.

Lance Raff, LLC used CFLRP funds to place aggregate, resurface roads, and perform slide repair in the Fog Mountain and Indian Hill area in 2014. They had one other employee besides the proprietor on the job for a total of about 500 person hours. They used dump trucks, an excavator, roller, compactor, and water truck. They rented most of the equipment used. The employee received on-the-job training in how to operate the water truck. Four subcontractors hauled aggregate for the job, at a cost of about \$70,000. The gravel came from Kooskia and the culvert and geotextile from Spokane.

8. TRENDS IN THE ECONOMIC IMPACTS OF THE SELWAY-MIDDLE FORK CFLRP

Figure 16 shows the amount of CFLRP funds distributed in the form of contracts in 2014 and the proportion of those dollars that went to local and non-local contractors. Between 2011 and 2014, about \$4.7 million in CFLRP funds have been applied to contracting. CFLRP funds for contracts averaged about \$1.17 million per year. The lowest year of contracts was 2013, which was also the only year thus far that non-local contracts were a higher proportion of total than local contracts.

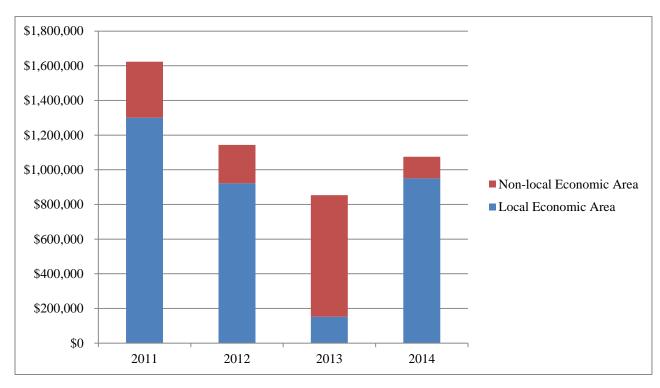


Figure 16. Total contract amounts by local and non-local economic area, 2011 through 2014.

Figure 17 shows the total number of contracts distributed between 2011 and 2014 and the split between local and non-local contracts. In all years but 2013, more local contracts were issued than non-local. In 2013, the split between local and non-local contracts was even.

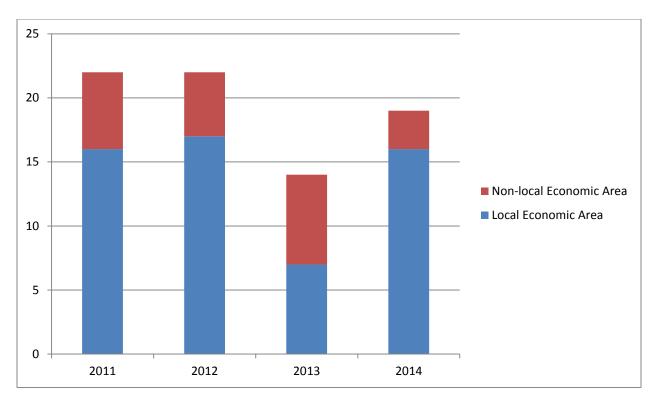


Figure 17. Total number of contracts by local and non-local economic area, 2011 through 2014.

Figure 18 shows the agreement amounts by type for 2010, 2011, 2012, and 2014. The Forest Service obligated amounts are the CFLRP agreement fund amounts. The average CFLRP agreement fund amount per year is \$957,815. The average matched and leveraged amount per year (combination of the three other categories) is \$539,931. Therefore, for every dollar that the Selway-Middle Fork CFLRP distributes in agreement funds, the Forest Service and partners leverage or match about 56 cents.

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¹⁶ The 2013 agreement data did not include obligated funds and, therefore, 2013 is not included in Figure 17. We will continue to pursue the 2013 agreement obligated funds data and will fill this in when those data have been received.

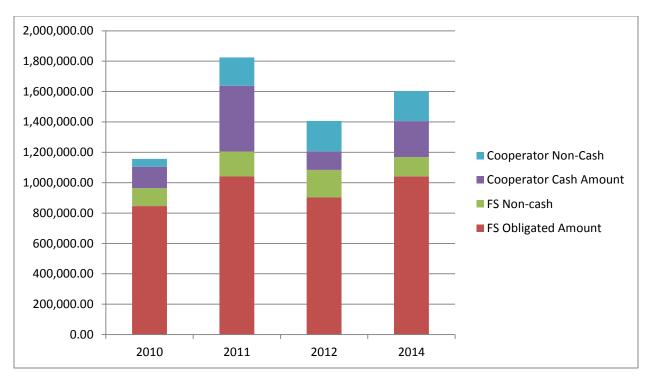


Figure 18. Agreement fund totals by type 2010, 2011, 2012, and 2014.

Table 15 shows the Forest Service's results from TREAT analysis for 2010 through 2014. CFLRP contract and agreement funds and matching and leveraged funds have supported, on average, 148.4 full and part-time jobs between 2010 and 2014.

Table 15. Forest Service TREAT results for 2010 through 2014.

	2010	2011	2012	2013	2014
Commercial Forest Products Activities					
Direct Jobs	20.3	36.8	24.2	33.5	26.9
Indirect and Induced Jobs	19.6	43	28.3	37.3	29
Total Commercial Forest Product Activities	39.9	79.8	52.5	70.7	56
Other Project Activities					
Direct Jobs	47.6	69.4	60	93.9	83.8
Indirect and Induced Jobs	20.4	14	14.3	28.2	11.7
Total Other Project Activities	68	83.4	74.3	122	95.3
Total Jobs	107.9	163.2	126.8	192.8	151.3

9. DISCUSSION

The 2014 work force reductions in the primary area and the low volume of timber harvested place greater importance on CFLRP funding for forest restoration efforts to retain the skills, equipment, and infrastructure necessary for the continued health of Clearwater Basin ecosystems and economies. Both the CFLRP 5-Year Report and the Selway-Middle Fork CFLRP Annual Report for 2014 suggest that CFLRPs can have a difficult time finding local contractors available and capable of performing the necessary restoration work. Continued CFLRP funding and collaboration appear to be sustaining forces for the ecosystems and economies in the Basin.

Contractors that engaged in discussions about CFLRP projects in 2014 did not have a clear understanding of the purpose and intent of the CFLR program. This suggests that there may be future opportunities for the Selway-Middle Fork CFLRP to outreach to contractors and the public to build more local support for the program. During discussions, the CRCDC suggested that the stability in CFLRP funding is essential to continue to get good restoration work done in the Basin. Perhaps local outreach efforts could build more public awareness and support for the multitude of positive impacts of the CFLR program. If the stability of CFLRP funding continues, market forces should help build the pool of local contractors available to do restoration work, which would continue to improve the local capture of CFLRP funds.

Whether through formalized training programs or on-the-job training, Selway-Middle Fork CFLRP funds and projects are building the skill sets from the ground up that are necessary for the continued growth and success of the forest restoration economy. To paraphrase two of the discussants this year, "we have become a farm league for forest workers" and "we are providing training to youth that gives the community some hope of being able to give their children fulfilling careers in the Clearwater Basin."

Like training opportunities, there is a myriad of benefits associated with the CFLR Program that are not as easily quantified as jobs or income. Those benefits include tourism, recreation, scenery, water quality and quantity, and other ecosystem services. By applying the ecosystem service concept to restoration efforts in the Basin, the Selway-Middle Fork CFLRP will begin to be able to communicate the economic value of restoration efforts not only in terms of jobs, income, timber, and reduction of fire suppression costs, but also in terms of the economic value that restoration efforts add to water quality, scenery, recreation, and other ecosystem services.

Besides ecosystem services, the CFLR program produces benefits to social capital.¹⁷ For example, discussions with Framing Our Community suggested that, with the help of CFLRP funds, they have been successful at changing the negative, polarizing impact of the 'timber wars' on their community. As the CBC continues in their efforts to enhance and protect the ecological and economic health of the basin through collaboration among historically conflicted parties, more and more evidence of the benefits of the CFLR program to the Basin's social capital will appear. Qualitative evidence of these benefits has come from the Selway-Middle Fork CFLRP Annual Report (U.S.D.A.Forest Service 2015b),

While not casual, our relationship has grown comfortable to the point where the Forests and CBC members can now dialogue openly on what would have been previously contentious issues. Success doesn't come easy and it has taken hard work to get to this point. A mutual understanding of the

¹⁷ Social capital is defined here as the collective value of social networks and their tendencies towards reciprocity.

challenges and opportunities of public land management has been gained through many field trips, meetings and conversations. The CBC represents many of the core values of residents of the Clearwater Basin and their interaction with the Forests has strengthened the management of the Forests, benefitting not only local communities but the greater public as well. (p. 4)

Capturing qualitative and quantitative¹⁸ data that provide evidence of these benefits should be a continued focus of socio-economic monitoring.

 18 Quantitative data on the benefits to the Basin's social capital may include avoided transaction costs, as suggested in subsection 2.2.6 of this report.

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