

Hughes Creek Social and Economic Indicators

2013 Final Report

Prepared by Salmon Valley Stewardship
for the
Lemhi Forest Restoration Group



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I. Introduction

Over the past five years, the Hughes Creek Hazardous Fuels Reduction Project resulted in the successful funneling of a revenue stream into Lemhi County and the surrounding region. Between 2008 and 2013, \$1,246,251 earned in Hughes Creek went to approximately 253 private sector workers (146 of these from the local workforce) and 25 students. During a period in which local unemployment rose sharply, the activities on public and private land in Hughes Creek resulted in Lemhi County private sector earnings totaling more than \$447,758.

The Lemhi Forest Restoration Group (Collaborative) began working with the Salmon Challis National Forest (SCNF), North Fork District on the Hughes Creek Hazardous Fuels Reduction Project in 2006. This 13,000 acre forest restoration project was collaboratively designed to reduce the density of vegetation and natural fuels to inhibit crown fire occurrence and potential fire spread within the Hughes Creek Watershed and surrounding communities (SCNF 2009).

II. Methods

The Collaborative multiparty monitoring committee established an initial set of goals to track the economic and social impact of the Hughes Creek Project on the local community. For this assessment a four-tiered system was used to define local, regional and other:

Table 1. Criteria Established by the Collaborative to Assess Range of Economic Impact		
Rank	Tier	Criteria
Local	1	Lemhi County
Regional	2	Within 150 road miles of the mouth of Hughes Creek
Other	3	Idaho, Montana, and Wyoming (> 150 road miles from Hughes Creek)
	4	All other areas

This assessment utilizes absolute measures, as defined by the U.S. Forest Service (USFS) Handbook (FSH 1909.17) to determine impacts on income and employment. This method uses actual dollar values and labor hours for impact assessment. Economic indicators consist of the number of local jobs created, the number of local contractors employed, the amount of partnership financing procured, and any potential increase in capacity of the local economy.

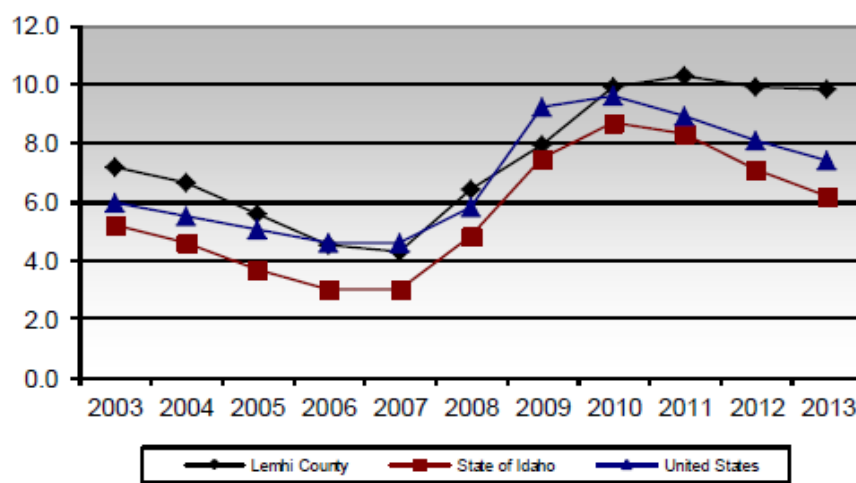
The social indicators monitored for this project strive to measure public knowledge and acceptance of forest restoration work, as well as public involvement. These indicators include the number of volunteers recruited, volunteer work hours performed, and attendance at outreach events.

The indices measured provide a framework for determining social and economic impact. As with any multiparty monitoring plan, there are many different protocols and approaches for monitoring success. This assessment relies on direct interviews with contractors, Lemhi County residents, participants in the Collaborative, the Forest Service, and other entities that worked to further the Hughes Creek Project objectives. The records from these entities provide insight into the impacts of the Hughes Creek Project on local and regional economies.

III. Lemhi County Economic Profile

To properly evaluate the social and economic impacts of the Hughes Creek Project on Lemhi County, it is necessary to understand the existing economic conditions. Lemhi County is a rural county with a population of 7,758 and a total of 1.7 persons per square mile. Compared to the rest of the United States, Lemhi County as a whole is a low-income area. The 2012 per capita income for the county was \$33,884, as compared to \$34,481 in Idaho and \$43,735 nationwide (Idaho Department of Labor 2014). Statewide, Lemhi County ranks 41st out of 44 counties in terms of median household income (Indicators Idaho 2014). Nationwide, Idaho ranks in the bottom quarter of states in median household income.

Figure 1. Lemhi County Unemployment Profile (Idaho Department of Labor 2014)



Lemhi County was not immune to the effects of national recession that began in 2008 and has felt the impacts of budgetary insecurity in recent years. In 2007, Lemhi County's unemployment had declined to 4.3 percent; since then rates have more than doubled, averaging 9.9 percent in 2012. Large summer fires over the last fifteen years have had a conflicting influence on the area, with temporary boosts in seasonal employment that are counter-balanced by heavy smoke and negative impacts on the recreational industries.

The community is responding by attempting to increase diversification and limit recessionary effects; however it remains heavily dependent on natural resources with over 90 percent of the land base owned by the federal government. As such, federal and local government employ 36 percent of Lemhi County's workers. Recent budgetary restrictions for federal agencies such as the USFS and BLM are having an impact on our local economy. Trade, transportation and utilities along with leisure and hospitality employ 29 percent of the labor force (Idaho Department of Labor 2014).

Due to the low income levels of the local economy, the funds resulting from the Hughes Creek Project are considered to have a magnified impact. Based on median household income, averaged from 2008-2012, every dollar spent in Lemhi County would have 21 percent more impact than that of the average county in the United States $(\text{U.S. Median Household Income} - \text{Lemhi County Median Household Income}) / (\text{U.S. Median Household Income}) = (\$47,015 - \$36,372) / (\$47,015) = 0.21$ or 21% (US Census Bureau 2014).

IV. The Role of Stewardship Agreements

In 2003, Congress authorized the Forest Service and Bureau of Land Management (BLM) to enter into stewardship contracts and agreements to achieve public land management goals that meet rural community needs. When the Collaborative outlined objectives for the Hughes Creek Project, their priorities included the use of stewardship contracting to boost local economic stability. One of the most significant milestones for the Hughes Creek Project was the use of Stewardship Contracting Authority and the agreement between the SCNF and Rocky Mountain Elk Foundation (RMEF).

Between 2006 and 2011, RMEF accomplished stewardship activities to support wildlife habitat on nearly 20,000 acres of national forest land throughout the United States. During this time, RMEF entered into a stewardship agreement with the SCNF that encompassed 194,000 acres of the North Fork District. The larger coverage area was intended to provide for future projects of various sizes within the district. This ten year stewardship agreement allowed the SCNF to tailor contracts to match the capacity of local and regional businesses using best value bid criteria.

Best value criteria were used in both 2011 and 2012 to select contractors from the bid solicitation. In 2012, based on lessons learned in 2011 and recommendations from the Collaborative, the weighting was adjusted to provide for an even higher local workforce priority (Table 2).

At the time of the agreement between RMEF and the SCNF, Lemhi County did not have a business or organization with the capacity to manage a stewardship contract. RMEF had been participating in the Collaborative and expressed interest in working with the Lemhi County Economic Development Association (LCEDA) to manage the project. This provided for local assistance by LCEDA and mentoring by RMEF in the stewardship contracting and implementation process.

Under federal agreement law, non-agency partners were potentially liable for all damages associated with operationally caused incidents such as a wildland fire or equipment accident under these agreements. Such liability is capped in traditional timber sale contracts, generally in a manner related to the value of the goods (i.e. timber). However, under Stewardship Authority, liability was not limited. Therefore each contractor working under the RMEF Hughes Creek supplemental project area agreement was required to carry a minimum of one million dollars of liability insurance.

In July 2011, during commercial logging operations administered by RMEF in Hughes Creek, two small equipment fires were ignited. Although the fires were extinguished quickly, the potential liability of these ignitions caused RMEF's board of directors to re-assess their role in Stewardship Agreements nationwide, in particular the lack of liability limits. This experience led RMEF to conclude that the benefits of their involvement in restoration projects did not outweigh their risk. RMEF gave notice in late 2011 that it would be withdrawing from



Table 2 . Best Value Criteria Applied to Hughes Creek Proposal Solicitation

Criteria	Weight 2011	Weight 2012	Description
Technical Proposal	30%	28%	Includes detailed plans and timelines for entire project
Past Performance	25%	19%	Includes completed comparable projects with references
Price	25%	25%	Total cost for project completion
Local Workforce	20%	28%	Detailed description of strategy to utilize local workforce

all existing Stewardship Agreements, both with the BLM and with the Forest Service. “Unlimited liability that is contained in Stewardship Agreement law put a chill on what was a booming aspect of stewardship contracting nationwide” (Pinchot Institute 2011). Restructuring existing projects and/or finding replacement partners for the stranded agreements continues to present large challenges nationwide.

In Hughes Creek, RMEF committed to co-administering the supplemental project agreement through the 2012 work season to prevent the SCNF from forfeiting more than \$200,000 appropriated for the project. During that time, LCEDA and RMEF representatives worked together to finish restoration activities in Hughes Creek and guide LCEDA through the agreement process. Concurrently, many parties including LCEDA, the Collaborative, Salmon Valley Stewardship (SVS), Idaho’s Congressional Delegation, and the Rural Voices for Conservation Coalition worked to resolve the national disconnect in Stewardship Agreement liability issues.

By 2012, the Department of Agriculture and Department of Interior determined that Stewardship Agreements were in fact eligible for the same liability standards applied under traditional timber contracts. However, small rural communities continue to struggle to find an organization with the capacity to take on a large Stewardship Agreement. In Lemhi County, LCEDA has stepped up to partner with the SCNF in a Stewardship Agreement. However, the learning curve is steep in light of complicated government contracting policies and their challenge continues to be the ability to maintain capacity to oversee these agreements.

Stewardship Contracting Reauthorization 2014

The Agricultural Act of 2014, or Farm Bill, included a provision for permanent authority for Stewardship End-Result Contracting for both the Forest Service and the BLM. Stewardship contracts are long-term, public-private partnerships on projects that promote forest health. They have proven to be a successful tool that support forest restoration work in areas without strong wood markets while providing value for local communities.

The Northern Rockies Stewardship Contracting Review Team used Hughes Creek for their 2011 and 2012 programmatic-level multiparty monitoring to evaluate the role of communities in stewardship contracting. This report concludes that there continues to be broad support for stewardship contracting. Permanent reauthorization of Stewardship Contracting under the Farm Bill of 2014 is considered a big win by small rural communities.

V. Economic Indicator Summary

Economic benefits derived from restoration activities are a direct result of how and where money is spent as the result of those activities (University of Oregon 2011). Throughout the implementation and primary treatment phase of the Hughes Creek Project, it was important to maintain a record of the successes, challenges and upcoming opportunities learned. This economic assessment is intended to preserve a summary of those findings.

The restoration work completed in the Hughes Creek Project area falls into several different categories. These categories provide an opportunity to measure and track over time whether project goals and objectives were met. As indicators they provide insight into the economic impacts of the project:

- Hazardous Fuel Reduction – commercial and non-commercial thinning
- Noxious and Invasive Weeds – prevention, treatment and monitoring
- Stream Restoration
- Aspen Restoration
- Multiparty Monitoring
- Road and Access Improvements
- Contract Administration

U.S. Forest Service Grants and Agreements

All parties involved in the Hughes Creek Project have experienced a steep learning curve when it comes to the Forest Service grants and agreement process. The problems AND solutions presented here are intended to help inform adaptive management, so future projects are more efficient. The grants and agreement process took much longer than expected to execute for Hughes Creek. As a result, no work was awarded or accomplished under the RMEF agreement in 2010. Because of an aggressive mountain pine beetle epidemic in the area, the delay most certainly diminished the value of the commercial timber, although no estimates have been made to quantify the loss. Another hurdle delaying the grants and agree-

ment process was the Region 4 interpretation that RMEF needed to provide a 20 percent match, although the Forest Service is authorized to adjust this to as low as 5 percent. After negotiations, the USFS required RMEF to demonstrate a 10 percent match. Collaborative members were able to help RMEF demonstrate match by documenting time and resources expended on the Hughes Creek Project, but according to Region 4 direction only those hours spent after the agreement had been finalized (August 2010) were eligible for consideration. Since partners had been working together on the design of Hughes Creek since August 2006, and implementing projects on private land since 2008, a great deal of in-kind match was not credited to the agreement.

A summary of the restoration activities conducted from 2006-2013 and anecdotal information follows. The anecdotal evidence is derived from direct interviews and is considered subjective information. These comments provide observations, criticisms, and recommendations that may be used to improve future restoration projects.

Hazardous Fuel Reduction

2009: The Lemhi County Wildland Urban Interface (WUI) program coordinated two contracts for hazardous fuels reduction activities on private property, using grant funds from the Idaho Department of Lands. These contracts went to two Lemhi County (Tier 1) contractors. In 2010 through 2012, one of these contractors continued to complete hazardous fuels projects on private lands in Hughes Creek with funding administered by Lemhi County.

2010: A 775-acre commercial timber sale in the Hughes Creek area was completed on public land, employing about 20 workers who earned more than \$200,000 in income from project activities. This sale was awarded outside of the Hughes Creek Stewardship Agreement (see Diamond Timber Sale). The Tier II company that harvested the timber, Pyramid Mountain Lumber of Seeley Lake, Montana (Pyramid) had been involved with the Collaborative and had a positive reputation with local Forest Service representatives. Because the sale was handled outside of the Stewardship Agreement, receipts were not retained by the project to accomplish needed service work.

2011: Under the RMEF Stewardship Agreement, three separate contracts for hazardous fuel reduction were completed on public land. Pyramid completed commercial harvest utilizing tractor and skyline operations. They subcontracted post-harvest service work (hand thinning) to another regionally based company from Missoula, Montana. Only two companies bid on the request for proposals for commercial work. Pyramid's mill, 150 miles away in Seeley, Montana, was the closest company with enough capacity for commercial harvest of this nature.

Also in 2011, two smaller fuel reduction units were completed along the main Hughes Creek Road using hand thinning and piling. These two smaller non-commercial projects were awarded to contractors from Lemhi County and one Tier 3 company based out of Moscow, Idaho.



The local company awarded the contract had little hazardous fuel reduction experience, but as a hunting guide service had extensive exposure to the remote backcountry near Salmon, Idaho. This Lemhi County company employed a completely local workforce and successfully built on their forest restoration skillset.

2012: Hazardous fuel treatment was limited to hand thinning and piling on public land in 2012. Eight companies attended a pre-bid meeting and submitted proposals for this work. This was a marked increase in interest from 2011, with two companies coming from

Hughes Creek Social and Economic Indicators 2013

as far away as Oregon. In 2012, three separate companies were awarded contracts for hazardous fuel work on thirteen separate units. All three of these companies had worked on the Hughes Creek Project in 2011.

2013: In June of 2013, the SCNF solicited the Collaborative's support and recommendations regarding changes to the proposed West Salzar timber sale after the Mustang Fire burned through the area in 2012. The project was slated for treatment in fall 2012 but was delayed by the fire. Approximately 350 acres of the original 1000 acres slated for treatment were burned by the fire to varying degrees. The SCNF originally dropped these burned units from the treatment solicitation, under the assumption that they would not be desirable to potential bidders for commercial harvest. Two companies attended the pre-bid meeting, however by the end of the solicitation period no bids had been received.

The SCNF made the decision to extend the bid period and solicited input from potential bidders. In conclusion, the SCNF decided to add the burned acres back into the solicitation as they were informed that this was the only way to make the sale viable. Adding the 350 acres back into the project resulted in a changed condition relative to the original project assessment. The SCNF re-marked the 350 acres and developed a new prescription to address the changes to the stand post-fire. After prescription clarification, the Collaborative supported this change and recognized the need to adapt after the unforeseen changes resulting from the fire.

Under a stewardship contract with Pyramid, skyline operations were subcontracted to a company out of Missoula, Montana. All of the workforce for this project came from Ravalli and Missoula counties, both considered regional area contractors. Timber volume sold from the Hughes Creek project is detailed in Appendix B.

Lessons Learned:

- The Collaborative decision to support the changes to the West Salzar Timber Sale was strongly aligned with data provided by pre-treatment and post-fire multiparty monitoring photo points. Members of the Collaborative felt more comfortable supporting a change to the treatment prescription with the baseline data available, as well the thorough justification for change provided by the SCNF.
- Using best value criteria allows companies to receive credit in their proposal ranking for "utilization of local workforce," but that commitment may be subject to change and is difficult to enforce. Additionally, once the commitment was made it was not always easy to find workers locally. More consistent availability of this type of work is needed to build local capacity and skill sets.
- While best value criteria encourages the utilization of a local workforce, one company employed at least 80 percent of their workers from the Southeastern U.S. in 2012. Even though this parent company is based in Idaho,



once a contract is awarded, it is difficult to anticipate the use of subcontractors and enforce the commitment to local workers. It was recommended that future contracts require the winning contract to supply hours worked, zip codes and amount earned by each tier group at the end of contract.

- The 2012, RMEF bid solicitation included preference points for minority-owned businesses and those in historically underutilized business zones (HUB Zones) as well as professional certifications. These preference points had the unintended consequence of outweighing the overall best value ranking process and were subsequently disregarded. If utilized in the future, consideration needs to be given for the weight of these “extra credit” factors relative to established objectives.
- While the Stewardship Agreement was intended to promote the local economy, much of the supplies and support services for the project came from outside of Lemhi County. For example, gas and food supplies were often brought from Montana’s Bitterroot Valley rather than purchased from local vendors. Many workers camped in dispersed Forest Service campgrounds which lessened the chance that workers would use private lodging or camping options, and increased impacts on small undeveloped areas where workers camped for extended periods. At least one specialist recommended that future agreements model the local BLM example and prohibit camping on public land, thereby encouraging the use of local infrastructure.
- The fuels reduction activities on private land in the Hughes Creek Project area in 2009 showed commitment on behalf of landowners and did a good job of “kick-starting” the overall project with on-the-ground results.
- A Lemhi County contractor hired a professional to help prepare their technical proposal – a factor they attribute to being awarded the contract. The requirements of preparing a technical proposal

Diamond Timber Sale

In 2006, the Alliance for the Wild Rockies appealed the SCNF Record of Decision for the Salmon Interface/Moose Creek Fuels Reduction Project on the North Fork District. The Regional Forester affirmed the SCNF decision, and Forest staff began implementing project objectives, including the sale of commercial timber harvest units in both Douglas fir and lodgepole pine forest types. In 2007, Judge Edward Lodge ruled in favor of the plaintiffs, the Alliance for the Wild Rockies, and ordered the halt of the timber sales. The SCNF had legally binding contracts with two companies, Forest Fuels Solutions of Salmon, and Pyramid Mountain Lumber

of Seeley Lake, Montana. In 2009, Forest officials offered Pyramid replacement value for 775 acres of the Hughes Creek Project area after the Environmental Assessment was complete and ready for implementation. Because Pyramid already had contracting documents in place, the SCNF chose not to convert the work to a stewardship contract. Collaborative members expressed frustration that a large segment of Hughes Creek’s commercial value was removed from the stewardship agreement units. Forest Service officials agreed that the situation was less than ideal, but they felt like no other suitable replacement timber that had gone through the National Environmental Policy Act (NEPA) requirements was available.

that meets federal government specifications can be intimidating. Smaller companies with little or no government contracting experience are less likely to have these skills.

- In 2011 contractors reflected positively on the project, but all shared the same concern: The time lapse from project introduction to bid acceptance to execution was viewed as too lengthy. Companies with other commitments were faced with difficult timelines due to repeated delays by the USFS on the contracting agreement. One contractor reported the price of gasoline at the time of bid was approximately \$1.80 per gallon, but had more than doubled by the time the work was completed, significantly reducing profit margins. Another reported that the timeline shift made it necessary to use their out-of-area workforce rather than hire locally so they could meet timelines and commitments for other contracts.
- Creating multiple, smaller treatment units was an effective way to allow smaller companies to work on restoration projects. However, having three separate companies, working according to different timelines, extended the anticipated contract administration and inspection workload and cost.

Noxious and Invasive Weeds

The Collaborative expressly stated their goal of “no net gain for invasive and noxious weeds” in the Hughes Creek Project area during project development. As such, the treatment and monitoring of noxious and invasive weeds was a high priority for multiparty monitoring.

In an effort to contain the spread of noxious and invasive weeds resulting from this project, the Lemhi County Cooperative Weed Management Area issued a cost share agreement for weed treatments on the private lands located within the project area. The funds were derived from a 2007-2009 National Forest Foundation mid-capacity grant to SVS, and matched with funds from private landowners. In 2008, a local weed contractor treated a total of 67.27 acres of land for 13 different landowners. The same company received repeat business from landowners in Hughes Creek in 2009-2011.

In a partnership between SVS, the Lemhi County Weed Superintendent, and the SCNF, more than \$3,700 went to 30 Lemhi County youth who collected *Cyphocleonus achates*, a root-boring weevil used as a biological control for knapweed. Many of these were released in the Hughes Creek area. Additionally, the collection of these bugs from a local insectory saved 50 percent on the purchase of these bugs (the “bounty” on the insects was 50 cents versus \$1.00 market value) and taught the youth and parents a valuable lesson about the stewardship of our forests.

Lessons Learned:

- The Hughes Creek project gave the collaborative a chance to test the waters on multiparty monitoring and learn what is most effective for citizen scientists. As the monitoring protocol evolved and improved, so did our



methodology and our credibility with our federal partners.

- All private properties to be treated were included in one contract. Due to the variability in terrain and weed coverage, it was difficult for the contractor to estimate treatment costs for all properties combined. Seeing this as an opportunity to gain repeat business, he purposely bid low. As a result the contractor received about half the hourly wage he typically charges. In the future, the contractor believes it would be better to bid on multiple contracts featuring individual properties. County Weed Superintendent concurred and would recommend in the future using cost sharing to ensure a multi-year approach to treating weeds.

Stream Restoration

During the design of the Hughes Creek Project, SCNF fisheries biologists observed that Hughes Creek's lower reach, adjacent to private lands, posed the most significant limiting factors for anadromous and other native fish species. In 2008, SVS took the lead on proposing a solution to this problem and secured the cooperation of a landowner with more than one mile of stream frontage.

In partnership with the Trout Conservancy of Montana, SVS secured funding from Formation Capital/Idaho Conservation League's Conservation Action Program and the National Forest Foundation Mid-Capacity Grant program for a stream restoration project in 2008 and 2009. The Trout Conservancy had experience working with a fisheries biologist and a horse logger from Montana, and was willing to demonstrate the benefits of the technique to partners in Lemhi County.

The horse logger used cable, block and tackle to move trees placed in the five log jam structures in the stream. A two day workshop was offered to those interested in draft horse logging, while the structures were installed. Federal agency officials in Montana and Idaho reported that horse logging is advantageous due to its low impact on sensitive sites, such as riparian areas. This workshop offered the benefit of informing local contractors of the potential economic opportunity stream restoration projects might offer.

Lessons Learned:

- The long term commitment of stream restoration relies on the ability of a stream to function naturally and re-establish itself hydrologically. Extremely high water in the spring proved that the dynamics of Hughes Creek under heavy runoff conditions make it a good candidate for floodplain capture. Concerns of a realignment of the creek in the adjacent pasture emphasized the need to maintain native riparian species along the stream corridor and that these natural systems are not always predictable.
- Results from five years of gravel monitoring and fish surveys showed a marked increase in spawning habitat quality and fish occupancy.



- Contracting a horse logger from outside Lemhi County drew some local criticism. Many volunteers were used to install log structures in the creek which required hands-on guidance of the large logs. Due to the technical nature of the project, project managers determined that someone experienced in horse logging and stream restoration techniques would create the safest environment. The logger employed had a unique set of skills that required a single source provider instead of a low bid contract.
- To improve the skill set of local contractors, SVS decided to structure this as a horse logging workshop, where interested parties could gain the skills necessary to bid on similar projects in the future. Only one interested logger attended (from Montana), but the workshop had unexpected benefits. Although interest from logging contractors was low, several other individuals interested in this innovative method of stream restoration attended, and have since followed up with additional training. Also in attendance were a private stream restoration consulting company, the Central Idaho representative for Trout Unlimited, and a representative from the Bureau of Reclamation who specializes in stream restoration.

Aspen Restoration

Aspen is not prevalent in the Hughes Creek Project area, however declining aspen occurrence has made it a focus of restoration efforts in many western ecosystems. In 2009, SVS received a Matching Awards Program grant from the National Forest Foundation to work on aspen regeneration in the Upper Salmon River Basin. The grant and matching funds enabled SVS to hire a part-time staff botanist to lead aspen inventory and monitoring in Hughes Creek. In those units where conifer encroachment was an impediment to aspen survival, contractors were hired in 2009 to thin and/or girdle conifers. A Lemhi County contractor, who had limited previous experience with hazardous fuels reduction projects on private land, was hired utilizing guidelines established by the Federal Service Contract Act as funding was of federal origin. This required that the contractor pay all employees prevailing wage, as well as provide workman's compensation insurance and liability insurance.

Lesson Learned:

- The small size of the aspen project allowed a local contractor with limited experience to learn important restoration standards and hazardous fuel removal techniques. The small company had little experience in bidding on a restoration contract or acquiring workman's compensation and liability insurance. They hired and trained four additional local workers and greatly increased their capacity to work on restoration projects.



Multiparty Monitoring

There were several underlying motivations for the Hughes Creek Project multiparty monitoring program. These included conflict management through shared learning; tracking data to inform future management and to construct a picture of change resulting from treatment; and implementation monitoring to track project accomplishments. This assessment is a direct response to the need to track success in meeting the economic goals stated for the Hughes Creek Project.

Collaborative members have contributed hundreds of volunteer hours to monitoring in the Hughes Creek (Table 3). This includes data collection for designated old growth units, fuels transects, aspen delineation, stream monitoring, weed inventories, and pre- and post-treatment documentation. Funding for multiparty monitoring has come from a variety of sources including the Central Idaho Resource Advisory Committee (RAC), National Forest Foundation, Brainerd Foundation, Titcomb Foundation, and the Kreilick Family Foundation.

Under the multiparty monitoring program, SVS employed both high school and college student seasonal employees, as well as a part-time supervisory position. As the coordinator for the Collaborative, SVS has taken a lead in maintaining the multiparty monitoring database. In 2013, the Central Idaho RAC funded a proposal from SVS to host a multiparty monitoring website for all Hughes Creek multiparty monitoring data. This database provides access to five years of information and represents hundreds of hours of volunteer time. The electronic database will be fully functional in August 2014. It is the intent that this site will continue to house data for future collaborative projects.

Lessons Learned:

- Multiparty monitoring has provided hands-on learning to Collaborative and community members. It is invaluable in conflict resolution and keeping members engaged in project activities, as well as helping to maintain their commitments to group objectives.
- Monitoring activities have increased SVS's capacity to work on restoration and monitoring projects. This has led to other monitoring and inventory work with federal partners and enabled SVS to continue to hire local workers and student interns.
- Managing and maintaining monitoring data in a readily available format is a large task. Acquisition of Geographic Information System (GIS) by SVS has made it easier to communicate and share data with partners.



Road and Access Improvements

The Hughes Creek Project included the replacement of the Ditch Creek Bridge as this bridge provides primary access to a large portion of the project area and had been removed. The bridge replacement and adjacent road improvements were funded by a

combination of appropriated agency funding and Central Idaho RAC funds. The winning bid went to a local construction firm which was able to provide employment for 12 local laborers while completing this project in 2009. Other road improvements in the project area included the replacement of two road culverts that were access barriers for fish passage. This work was also completed by local companies.

Lessons Learned:

- The owner of one company awarded the work reported that they gained a valuable new skill in road construction, allowing them to bid competitively on similar projects in the future.
- Other potential bidders commented that bundling the bridge replacement and road improvements excluded small contractors because of the high bonding requirements and the array of equipment needed. They felt that by creating a project of that magnitude, chances for interested contractors from outside the region were increased and local chances for employment were decreased.

Table 3. Volunteer Hours Attributed to the Hughes Creek Project

Year	Volunteers	Hours	Activities
2006	n/a	n/a	No records
2007	n/a	n/a	No records
2008	8	120	Stream restoration design, private landowner involvement
2009	32	260	Stream restoration project, aspen inventory, baseline multiparty monitoring
2010	5	45	Multiparty monitoring
2011	16	108	High water monitoring, stewardship contract review, multiparty monitoring, Idaho Forest Restoration Partnership workshop
2012	13	102	Multiparty monitoring, Idaho Forest Restoration workshop, Mustang Fire Tour
2013	36	437	Collaborative workshops, meetings, training, restoration projects
Total	97	970	

Contract Administration

To manage and administer the Hughes Creek Stewardship Agreement, RMEF committed staff members and worked with local partner LCEDA to perform contract inspections. From 2011-2012, seven non-federal workers spent a total of 960 hours to accomplish these administrative functions.

Although the Lemhi County Wildland Urban Interface (WUI) coordinator administered grants and contracts for private lands fuels reduction in the Hughes Creek area in 2009-2011, no hours were reported for that time period. In 2012, the WUI coordinator estimates approximately 450 hours or 27 percent of her time was committed to the Hughes Creek Project.

The RMEF contract inspector was responsible for periodic inspections of all active harvest units and

working directly with the timber contractors. It was agreed that all final inspections for completed work would be approved by the RMEF inspector, followed by a final SCNF inspection. Two local inspectors were hired in 2010 and 2011 by LCEDA.

Lessons Learned:

- The project administrator for RMEF in 2012 reported that one of the many highlights of the project was working with LCEDA on contract administration tasks. Having a local stakeholder directly involved in the management of the project proved to be a great asset when compared to other stewardship projects RMEF had throughout the country.
- The SCNF does not have much experience with Stewardship Agreements. Individual responsibilities and comfort levels for inspections and work completed varied among SCNF specialists. As a result, rather than relying on inspections conducted by RMEF in 2011, the SCNF spent about the same amount of time conducting inspections as they would have under a traditional sale. In 2012, SCNF and RMEF project inspectors improved on this relationship and assisted each other in streamlining the inspection process. Forest staff's confidence in the ability of the third party project managers and inspectors will be a measure of success as agreements move forward in the future.
- The availability of non-federal local specialists qualified as contract inspectors is limited. Beyond the technical specialties of administering a timber contract, it is arduous work that requires the ability to work in remote conditions. Developing a larger pool of qualified local inspectors who can establish rapport with SCNF personnel will greatly increase the effectiveness of Stewardship Agreements.

VI. Social Indicators

Direct community involvement and public knowledge, as well as community acceptance of forest restoration projects are key components of project success. The indicators used to assess these are volunteers recruited, volunteer hours performed, and attendance at outreach events.

The Collaborative and its members have maintained a commitment to the Hughes Creek Project since 2006. Time spent in meetings captures only a fraction of the time Collaborative members actually contributed to the project's success, the numbers are significant. Outreach events, workshops, and tours provide another way to share information about and garner support for the collaborative effort (Table 4).



Collaborative members and community volunteers also spent time helping on the ground performing important tasks such as aspen inventory, roadside fuels reduction, stream restoration and monitoring. The high level of volunteer participation is considered an indicator of positive public perception of the project. In 2013, Independent Sector, a coalition of nonprofits that researches philanthropic trends, estimated that the value of volunteer time is \$22.55/hour. Using this figure, volunteers have

contributed more than \$21,870 of time to the Hughes Creek Project.

Table 4. Meetings, Presentations and Field Trips Conducted for the Hughes Creek Project

Year	Meetings/ Field Trips	Non-Federal Participants At One or More Meeting	Events Where Hughes Creek Project Was Presented
2006	8	24	n/a
2007	7	34	n/a
2008	3	21	2
2009	4	25	5
2010	5	27	2
2011	6	27	6
2012	7	28	3
2013	9	63	7
Total/Average	33/6	249/31	25/4

Other social indicators considered in this assessment are anecdotal. One convincing case of increased community support and trust arose when Pyramid prepared to start their timber sale in 2010. The Collaborative priority for future condition in Hughes Creek favored ponderosa pine over competing Douglas Fir. However, Pyramid brought it to the SCNF’s attention that pine beetle had hit the sale units and if they followed the original prescription, few live trees would be left standing. The SCNF consulted with members of the Collaborative, and the group agreed that re-marking the sale to reflect the on-the-ground conditions was the wisest course of action. SCNF officials commented that prior to this collaborative project, making such a change would have drawn criticism.

Lesson Learned

- Other evidence of the impacts collaborative efforts are making nationally is demonstrated when considering the liability limits for Stewardship Agreements. In 2011 Collaborative members presented the barriers this liability would impose on future activities planned under Stewardship Agreements to Idaho’s Congressional delegation, the Stewardship Contracting Review Team, and policy partners at Rural Voices for Conservation Coalition. This commitment to the use of Stewardship Agreements to sustain local economy made an impact with national policy makers and helped to resolve a frustrating situation.



VII. Other Lessons Learned—The 2012 Fire Season

There is a need to reduce the current risk of uncharacteristic, large crown fires occurring on National Forest Lands within the Hughes Creek and Gibbonsville areas where private lands and residences are classified as wildland urban interface (WUI). The purpose of this proposal is to ... inhibit crown fire occurrence and potential spread ... into the adjoining ..communities, (Purpose and Need Statement for the Hughes Creek Project Environmental Assessment, 2009).

The 2012 fire season broke records in Idaho. The Mustang Fire complex on the North Fork District alone burned 340,000 acres and covered much of eastern Idaho and western Montana in a shroud of smoke throughout August and September. According to the Forest Service, efforts to corral the Mustang Complex cost approximately \$38 million. At the peak of activity, 1,100 fire fighters worked on fire lines. Several residents, including those in Hughes Creek, were asked to evacuate their homes, some for as long as 21 days. Road closures and heavy smoke impacted many local businesses and residents.

Lessons Learned

- The occurrence of large wildland fires is predicted to continue in light of climate change and overstocked forest habitats, many suffering from heavy beetle kill. While large fires in Idaho are not a new occurrence, in 2012, the social and economic impacts of fire were hard to ignore.
- Smoke from wildfires was an expensive side effect for the community and citizens. It exceeded critical thresholds in Lemhi County multiple times during a six week period, taxing citizens health and stressing the tourist and recreation industries. Youth sports teams were unable to practice or hold home games. Many residents left the area until the fires were out.
- The Hughes Creek Project is credited by the SCNF and fire managers as an important component of the suppression strategy used on the Mustang Fire. Local support for collaboratively developed restoration is high, and it is important to recognize the effect this will have on the social and economic well being of the community.

Forest Health and Rural Emergency Services

Large fires such as those seen in the SCNF in the past two decades are causing increased stress on local emergency service resources and residents. Smoke from wildfires filled the valley for over six weeks in 2012, exceeding air quality index safety thresholds and causing increased and prolonged health problems for many community members, in particular the elderly and very young.

A total of five rural fire departments assisted in fire protection and evacuations for the Mustang Fire. The North Fork Volunteer Fire Department provided structural and wildland fire suppression, and rescue and fire prevention services to North Fork and Gibbonsville, Idaho. In 2012, the Mustang Fire severely taxed the resources of this rural fire program. “We receive approximately \$34,000 of tax support each year. If we had gone another day, it is likely that the Mustang Fire would have broken this department financially,” Mike England, the North Fork Fire Chief.

VIII. Findings

Between 2008 and 2013, \$1,273,894 earned in Hughes Creek went to approximately 278 private sector workers, 146 of these from the local workforce (53 percent). By the end of 2013, Lemhi County residents had earned 35 percent of all revenue generated by the project (Table 5 and Appendix A).

Table 5: Hughes Creek Private Sector Earnings by Program 2006-2013

Project Element	Dollars		Workers ¹	
	Lemhi County	Other	Lemhi County	Other
Hazardous Fuels	201,160	788,056	70	119
Noxious Weeds	11,090	0	33	0
Stream Restoration	11,040	8,450	6	4
Aspen Restoration	15,534	0	5	0
Multiparty Monitoring	27,160	14,460	12	4
Road & Access Improvements	150,374	0	12	0
Contract Administration	28,400	18,170	8	5
Totals	\$444,758	\$829,136	146	132
Percentage	35%	65%	53%	47%

¹ The number of workers is adjusted to an annual total regardless of whether the same individual was employed in consecutive years.

IX. Ongoing Socioeconomic Monitoring

The Lemhi Forest Restoration Group is now collaborating on three landscape scale projects with the SCNF: Hughes Creek, Upper North Fork and Jesse Creek. As these projects move forward, it is important to continue tracking the socioeconomic effects of restoration activities on the local community to provide for adaptive management and effectiveness determinations (Table 6).



Table 6. Recommended Social and Economic Tracking for Future Projects

Activity	Timeline	Contact	Indicators
Contract Award Updates	Continuously	Lemhi County WUI Coordinator SVS – Collaborative Coordinator LCEDA	Names, zip codes, hours and contract dollars for workers
Record Current Economic Conditions of Lemhi County	Annually	Bureau of Labor Statistics Headwaters Economics US Census Bureau Idaho Department of Labor	Median Household Income, Unemployment Rate
Record Volunteer Effort and Event Attendance	Continuously	SVS and Partners	Number of volunteers, Total Volunteer Hours, Event Attendance
Follow up with Contractors	After Contract	Individual Contractors	Qualitative Contractor Information
Track Labor completed in Collaborative project areas	Continuously	SCNF LCEDA Lemhi County WUI Coordinator Lemhi County Weeds Superintendent	Acres Treated, Dollars Spent, Local Laborers vs. Non-Local, Labor Hours

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Appendix A. Hughes Creek Project Economic Benefit in the Private Sector¹

Year	Distance Tier	Revenue	Laborers	Labor Hours
<i>Hazardous Fuels Reduction</i>				
2009	1	\$21,907	8	576
2010	2	\$217,837	20	11775
2011	1	\$74,612	7	2,385
	2	\$160,000	34	10,900
	3	\$32,400	12	1,296
2012	1	80,332	16	2,915
	2	73,158	14	2,150
	3 & 4	100,436	13	Not Available
2013	1	138,910	13	Not Available ¹
	2	204,626	16	Not Available ¹
Project Total		\$965,447	153	31,997
<i>Noxious and Invasive Weeds</i>				
2008	1	\$3,103	1	84.5
2009	1	\$835	1	19.5
2010	1	\$608	1	13.5
2011	1	\$3,738	25	100
2013	1	2806	2	116
Project Total		\$8,284	28	218
<i>Stream Restoration</i>				
2008	1	\$4,725	2	275
2009	1	\$5,755	3	371
	2	\$8,450	3	280
2010	1	560	3	10
2011	1	650	4	10
2012	1	560	3	10
2013	1	560	3	12
Project Total		\$21,260	21	968
<i>Aspen Restoration</i>				
2009	1	\$15,534	5	304
Project Total		\$15,534	5	304
<i>Multiparty Monitoring</i>				
2009	1	\$1,800	1	120
	2	\$4,500	1	300
2010	1	\$8,095	5	560
	2	\$8,320	1	320
2011	1	\$8,266	5	591
	2	\$1,640	1	82
2012	1	\$9,496	5	680
2013	1	4,000	3	160
Project Total		\$46,117	22	2,813

Appendix A. (Continued)				
<i>Ditch Creek Bridge Project and Road Improvement</i>				
2009	1	\$150,374	12	612
Project Total		\$150,374	12	612
<i>Contract Administration</i>				
2011	1	\$7,985	3	281
	2	\$10,543	2	327.5
2012	1	\$13,082	5	218
	2	\$7,625	2	150
Project Total		\$39,235	12	975
2008-2013 Total		\$1,246,251	253	325,861
¹ Years not represented did not have available data or activity				

Appendix B. List of Hughes Creek Project Timber Sales		
List of Sales Sold	Year Sold	Volume (CCF)
Diamond Modification	2009	1,934
Gibbonsville Modification	2009	1,888
GA Hughes Creek SPA (Ditch Creek)	2010	3,920
West Salzer	2013	6,047