

**CFLR Project (Name/Number): Uncompahgre Plateau Project/CFLR003**

**National Forest(s): Grand Mesa, Uncompahgre and Gunnison National Forest**

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

**1. Match and Leveraged funds:**

**a. FY15 Matching Funds Documentation**

<b>Fund Source – (CFLN/CFLR Funds Expended<sup>1</sup>)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
CFLN14	\$11,362
CFLN15	\$506,652

<b>Fund Source – (Funds expended from Washington Office funds (in addition to CFLR/CFLN)<sup>2</sup> (please include a new row for each BLI))</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
NFVW0413	\$622,400

<b>Fund Source – (FS Matching Funds (please include a new row for each BLI)<sup>3</sup>)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
BDBD	\$17,337
CMTL	\$8,126
CWKV	\$1,719
NFTM	\$744,584
NFVW (FY-15)	\$59,164
NFVW (FY-13)	\$397,212
NFWF	\$219,748
RTRT	\$2,278
SPFH	\$79,077
SSSS	\$67,040
WFHF	\$562,842
Total	\$1,761,915

<b>Fund Source – (Funds contributed through agreements<sup>4</sup>)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
Tri-State Weed Agreement (CWFS)	\$15,546
Colorado Parks and Wildlife (NFXN)	\$110,000
Rocky Mountain Elk Foundation (NFXN)	\$20,651
National Wild Turkey Federation (NFXN)	\$5,000

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

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

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

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

<b>Fund Source – (Funds contributed through agreements<sup>4</sup>)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
Colorado Parks and Wildlife OHV grant – Grand Valley, Ouray, Norwood (CMXN)	\$106,831
<b>Total</b>	<b>\$258,028</b>

<b>Fund Source – (Partner In-Kind Contributions<sup>5</sup>)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
Delta County Joint School District	\$1,800
Montrose County (Weed Agreement)	\$3,407
Norwood High School	\$9,100
Colorado Forest Restoration Institute	\$8,852
Uncompahgre Partnership – Montrose HS program	\$10,600
Uncompahgre Partnership – Native Plant Program	\$21,000
Mule Deer Foundation (Horsefly Stewardship)	\$80,668
Public Land Partnership (Volunteers – 42 hours)	\$924
Cobble Creek Hikers (Volunteers – 66 hours)	\$1,452
<b>Total</b>	<b>\$137,803</b>

**For Contracts Awarded in FY15**

<b>Service work accomplishment through goods-for services funding within a stewardship contract</b>	<b>Totals</b>
Total amount of stewardship credits charged for contracts awarded in FY15 <sup>6</sup>	\$0
Total revised credit limit for contracts awarded in FY15 <sup>7</sup>	\$1,013,625

**For Contracts Awarded Prior to FY15**

<b>Service work accomplishment through goods-for services funding within a stewardship contract</b>	<b>Totals</b>
Total amount of stewardship credits charged in FY15 <sup>8</sup>	\$371,941
Total revised credit limit for open and closed contracts awarded and previously reported prior to FY15 <sup>9</sup>	\$2,460,452

**b. Please provide a narrative or table describing leveraged funds in your landscape in FY2015 (one page maximum).**

Leveraged funds refer to funds or in-kind services that help the project achieve proposed objectives but do not meet

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

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

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

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

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

match qualifications. Examples include but are not limited to: investments within landscape on non-NFS lands, investments in restoration equipment, worker training for implementation and monitoring, and purchase of equipment for wood processing that will use restoration by-products from CFLR projects. See “Instructions” document for additional information.

**Leveraged funds in landscape for FY2015**

Description of item	Where activity/item is located or impacted area	Estimated total amount	Forest Service or Partner Funds?	Source of funds
Native Seed Coordinator	Position provided through the Western Colorado Landscape Collaborative	\$48,000	Forest Service and Partner funds: \$20,000 FS and \$28,000 partner.	Forest Service – NFWW. Funds also provided by Bureau of Land Management; Colorado Parks and Wildlife and Colorado State grants.
Schedule A Road Maintenance Agreement	Approximately 62 miles of high clearance road maintenance were performed in 2015. Approximately 42 miles of roads were maintained with the use of the Forest Road Crew.	\$111,600 – CMRD \$800,000 – State of Colorado funds provided to various counties.	Forest Service and Partner funds	Forest Service – CMRD; Partner - State of Colorado

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

The National Cohesive Wildland Fire Management Strategy is a strategic push to work collaboratively among all stakeholders and across all landscapes, using best science, to make meaningful progress towards the three goals:

- Resilient Landscapes
- Fire Adapted Communities
- Safe and Effective Wildfire Response

**Vision:** To safely and effectively extinguish fire when needed; use fire where allowable; manage our natural resources; and as a nation, to live with wildland fire.

Due to significant moisture in April through June (May was 270% of normal while June was 166% of normal) in the area we did not have any significant wildfire occurrence this last season. However, we have been doing some prescribed burning this fall in, or adjacent to, areas that were previously prescribed burned. In one instance where the target acres had been previously burned we were able to re-understory burn ponderosa pine to both remove re-sprouting oakbrush and to further raise the crown base height of the pine throughout the stand; we were able to use a fairly hot prescription in which even 4-6’ and up to 10’ flame lengths did not hurt the ponderosa pine trees. A prescribed burn completed in October 2015, utilized previously burned areas to help control this 1,400 acre burn. The burn is referred to the Dave Wood burn and will be reported in FY16.

After numerous years of implementing mechanical treatments (both logging and non-commercial mechanical), as

well as prescribed fire, we are beginning to see changes in the landscape level fuels complex on a large enough scale that reduced risk to WUI and more opportunities to successfully manage ignitions across the landscape is becoming a reality in many locations. Monitoring of fuel conditions on the Escalante project area (NEPA completed for the 136,000 landscape completed in 2014) are discussed in Section 6 of this report.

We implemented, or contracted, several projects. The Naturita Project was a contract recently awarded to masticate 865 acres of oak under a pine understory south of a WUI area (Naturita Project). The area will be prescribed burned 2-3 years after the mastication is complete to further reduce oak and reintroduce fire to the pine stands. This area is also in a CWPP area. We burned 290 acres at the Glencoe project as a pine reentry (2nd, and even 3rd fire entry in some locations throughout the burned area). The 290 acres will act as a blackline buffer for the next season or two when we plan to burn approximately 1,500 more acres to the south and west of the buffer.

Adaptive management allows altering of management prescriptions and techniques to obtain resource management objectives. On October 28, fire staff completed an AAR (After Action Review) to discuss management of the Dave Wood 8 prescribed burn so that we can more effectively and safely implement similar burns in the future. We have also had discussions regarding the process of contract layout and development on the Naturita Project so that we will be better prepared to quickly implement similar projects if funding comes available. Findings from these reviews will be provided in the 2016 CFLR Accomplishment Report.

Each of these examples above helps support the goals of the 10 Cohesive Strategy by creating landscapes that are more resilient to fire and other disturbances, such as insects, disease, and even climate change, reducing risk to WUI areas by creating more fire adapted communities, both vegetative communities and social/cultural communities, and by giving our fire program more experience managing fire and reducing/modifying fuels complexes and future fire behavior so that future wildland fire response in key areas can be more efficient and safe.

**2b. In no more than two pages** (large landscapes or very active fire seasons may need more space), **describe other relevant fire management activities within the project area:**

We trained 47 new firefighters on the forest this fire season (23 Job Corp students and 24 FS seasonals and permanents). Though we do not have total cost of training this added a significant cadre of young fire staff to our program and spread the fire message into other resource areas such as recreation, wildlife, and timber. Other preparedness expenses were normal for a typical season, with no significant suppression costs due to very wet, and unburnable conditions.

As mentioned previously, we had significant Spring and early-Summer moisture and had no significant wildfire events on the Forest this season and subsequently no need for BAER efforts either. All fires were contained at IA with minimal acres burned this season (less than 5 acres on the Forest). In 2015, no unplanned ignitions were managed for resource benefit due to very wet, unburnable conditions through much of the fire season.

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

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

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income <sup>10</sup>
Commercial Forest Product Activities	31	72	\$1,584,821	\$3,236,575
Other Project Activities	7	9	\$249,161	\$310,016
<b>TOTALS:</b>	<b>38</b>	<b>81</b>	<b>\$1,833,982</b>	<b>\$3,546,591</b>

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

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income <sup>11</sup>
Commercial Forest Product Activities	31	72	\$1,584,821	\$3,236,575
Other Project Activities	30	41	\$1,670,004	\$2,074,687
<b>TOTALS:</b>	<b>61</b>	<b>113</b>	<b>\$3,254,825</b>	<b>\$5,311,262</b>

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

During FY-15, numerous projects were accomplished that created jobs for our local communities, contractors, and youth. Communities surrounding the project area are rural and rely on the use of public lands to create job opportunities through recreation, hunting, grazing, and resource extraction. As project implementation continues, we expect an increase in wood products, which in turn will result in an increased opportunity for timber industry and/or other forest-products related businesses. Project implementation is leading to healthier ecosystems that will support business activities of surrounding rural communities, as well as restore our fire adapted ecosystems so that the risk of catastrophic wildfires are reduced. Beyond these broad accomplishments for FY15, specific benefits to communities in Western Colorado include:

Wood products offered from the Uncompahgre Plateau include stewardship contracts and agreements, green aspen and small salvage sales. All timber sale projects have been purchased and stewardship contracts/agreements awarded. Total volume sold in 2015 was 11,614 ccf. Volume harvested from prior year was 5,518 ccf. Log trucks continue to deliver loads of spruce/fir and Douglas fir to Montrose Forest Products (MFP) and other regional mills on a daily basis.

A social-economic analysis was completed for task orders issued in 2013. The analysis estimated restoration activities in 2013 contributed approximately \$46,275 in labor income and \$100,021 in GDP to the local economy. In addition, a total of 1.16 full- and part-time jobs were calculated. More details are available in section 6 of this report.

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

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

Forty-seven new firefighters on the forest this fire season (23 Job Corp students and 24 FS seasonals and permanents). Though we do not have total cost of training this added a significant cadre of young fire staff to our program and spread the fire message into other resource areas such as recreation, wildlife, and timber.

Since 2010, 50 high school students and 8 teachers have been participated in monitoring efforts. Two students converted their projects into High School Science Fair projects. Both students placed at the Regional Science Fair and 1 student made it to the International Science Fair where she received a full-ride \$150,000 scholarship to Drexler University.

One mid-winter stakeholder meeting and two field trips were completed in 2015. Approximately 80 scientists, representatives of local, state federal governments participated.

Stakeholder involvement remains high on the project. Data provided by the National Forest Foundation (NFF) in 2014 indicated over 80-85% of the Uncompahgre Project stakeholders responding to the NFF survey believe the project is on track and that the project is improving forest resiliency.

The Grand Mesa, Uncompahgre and Gunnison National Forests are currently using the collaborative process developed under CFLR as a model for a multi-year spruce and aspen management project. The Spruce Beetle Epidemic and Aspen Decline Management Response (SBEADMR) EIS will be released in February 2016.

The greatest limiting factor to achieving increased community benefit is the sharp reduction in funding beginning in FY16 through the remainder of the grant funding period (2019). In the original grant proposal developed in 2010, restoration work was believed to curtail beginning in 2016. In reality the work has accelerated do to wide community support and additional acres cleared through the NEPA process. In FY16 alone, an additional \$400,000 is needed to complete all planned work. Funding in 2017-2019 will decline further but the need is expected to stay at or above 2016 levels with is approximately 1 million dollars per year.

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

Collaborative efforts spanning the past decade and a half have led to the development of a set of six goals for improving the future landscapes of the Uncompahgre Plateau. These goals help Forest personnel and our partners to formulate monitoring needs and questions to help guide managers through an adaptive management cycle.

Enhance the resiliency, diversity and productivity of the native ecosystem on the Uncompahgre Plateau using best available science and collaboration.

Reintegrate and manage wildfire as a natural landscape scale ecosystem component that will reduce the risk of unnaturally severe or large crown fires.

Restore ecosystem structure, composition and function to encourage viable populations of all native species in natural patterns of abundance and distribution.

Preserve old or large trees while maintaining structural diversity and resilience; the largest and oldest trees (or in some cases the trees with old-growth morphology regardless of size) should be protected when feasible from cutting and crown fires, focusing treatments on excess numbers of small young trees where this condition is

inconsistent with Historical Range of Variability (HRV) conditions.

Reestablish meadows and open parks and re-establish grasses, forbs, and robust understory communities.

Manage herbivory - Grass, forbs, and shrub understories are essential to plant and animal diversity and soil stability. Robust understories are necessary to restore natural fire regimes and to limit excessive tree seedling establishment. Where possible, defer livestock grazing after treatment until the herbaceous layer has established its potential structure, composition, and function. Project partners will work with the CDOW to manage big game populations to levels that will contribute to successful restoration treatments.

In March 2015 stakeholders were invited to hear results of monitoring completed in 2014 and to identify and prioritize monitoring priorities to be completed in 2015. Two monitoring field trips were held in 2015 with 50 stakeholders participating. At this meeting the collaborative group determined a need to have a fall meeting to re-assess monitoring needs for the remainder of the CFLRP project (2016-2019). The Monitoring Guidance Committee (MGC) met with stakeholders on October 27 with the following outcomes:

Attendance at the meeting was small but did include representation from CFRI, UP, and USFS. A review of past monitoring efforts was completed and a plan for the future was established. The group decided to increase monitoring of wildlife and to include more monitoring efforts on the North end of the CFLRP area. Monitoring efforts were reviewed to ensure focus on established ecological indicators. Decision was made to hold the annual stakeholder meeting in late January or early February to discuss specific details of an up-dated monitoring strategy.

### **Summary of Collaborative Monitoring Completed in 2015**

#### **Project: Escalante Forest Restoration - Forestry Intern Program**

The Montrose Forestry Intern crew collected a huge amount data in 2015 which will be processed for the spring 2016 stakeholders meeting. They completed post-treatment fuels and forest data collection in the Uncompahgre Mesas project area, and took post-treatment photos of all plots. There are now pre- and post-treatment data which can be compared to monitor treatment effectiveness. The crew also installed some additional pre-treatment fuels and forest inventory plots in the Lockhart area to increase coverage within the now-final timber sale boundaries, providing better baseline data for monitoring these in-progress treatments.

The crew added a new component to the monitoring program by completing intensive regeneration surveys (242 plots) in post-harvest (but pre-burn) units in the Uncompahgre Mesas project area. One of the objectives of the prescribed burn is to stimulate aspen regeneration and provide bare mineral soil thought to help ponderosa regeneration. The previously measured monitoring plots were not designed to capture accurate regeneration values; they are about 0.5 – 0.6 acres in size, few in number, and regeneration data were collected only on a small portion of these plots. Seedling /sucker densities are usually highly variable within stands, and therefore the low density of plots did not provide estimates of regeneration across treatment units. The 242 plots inventoried in summer 2015 provide post-harvest but pre-burn data to which we can compare the post-burn regeneration. We will now be able to monitor if burning is helping to meet regeneration objectives. Further, the 2015 plots were installed as near as possible to the Common Stand Exam plots inventoried by the Forest Service before treatment, and used comparable protocol. Regeneration density post-harvest and post-burn averaged to the stand-scale will therefore be comparable to pre-treatment regeneration numbers.

#### **Project: Social-economic impacts of CFLR Task orders**

On an annual basis, the Colorado Forest Restoration Institute completes a social and economic monitoring

assessment for the project. During 2015, the project received the report for activities that occurred in 2013. This project-level assessment identifies the local economic contributions and summarizes the wood utilization associated with the UP-CFLRP task orders.

In 2013, the UP project was allocated \$504,996 of CFLR dollars and an additional \$310,400 in carryover funds from the previous year. The resulting \$815,396 total of CFLR and supplemental funds went to contracts to complete work in the UP-CFLRP project area in FY 2013, with a total of 2,134 acres treated on National Forest System land.

A total of \$1,482,208 in matching funds was also used to complete work for the UP-CFLRP in FY2013. This included: 1) \$1,125,572 in USFS matching funds, which were primarily used for USFS salary related to contract preparation and work associated with the UP-CFLR project; 2) 'Funds contributed through agreements' with partner organizations to implement and monitor efforts within the CFLR project area totaling \$212,148; 3) 'Partner in-kind contributions' totaled \$139,218, which included volunteer in-kind contributions and cash donations through agreements and grants; and 4) 'Service work accomplishment through goods-for services funding...', were equal to \$5,270 for work completed through stewardship contracts in FY2013.

Additionally, leveraged funds, which are funds used by partners to accomplish restoration activities on non-National Forest System lands associated with the UP-CFLRP project area, totaled \$50,000 in FY2013. The Western Colorado Landscape Collaborative (WCLC), which has been a partner with the Grand Mesa, Uncompahgre and Gunnison National Forests, received the 2013 Colorado Collaboration Award. The WCLC was recognized for their work with state and federal agencies, local utilities, and other non-profit organizations to improve ecosystem health, wildlife habitat, and reduce severe fire risk throughout Western Colorado. Much of the WCLC's work has been completed on the Uncompahgre Plateau. The award included a \$50,000 prize, which was used by the WCLC to continue their collaborative efforts.

**Economic Contributions**

One contractor worked on two task orders associated with the UP-CFLR project in 2013. One task order initiated in 2012 and was completed in 2013. The second task order initiated in 2010 was also completed in 2013.

The economic effects of these restoration activities were identified using Input-Output (I-O) modeling of operational expenditure and labor information obtained from the contractor. Our analysis estimates the restoration activities in 2013 contributed approximately \$46,275 in labor income and \$100,021 in GDP to the local economy (See Table below). In addition, a total of 1.16 full- and part-time jobs were calculated. All company employees reside within Colorado and are able to commute to work. The UP-CFLRP primary commercial contractor subcontracted two other companies from Colorado to assist with mechanical forest management operations. The primary contractor also subcontracted one company from out-of-state who hired crews locally in Colorado to complete the work.

**Economic Contributions of UP-CFLRP Task Orders in 2013**

<b>Employment (Full and part time jobs)</b>	<b>Labor Income (2013 US)</b>	<b>Value Added (2013 US)</b>
1.16	\$46,275	\$100,021

**Project: Noxious Weeds**

Within the CFLRP landscape 337.5 acres were monitored for invasive plant treatment efficacy in fiscal year 2015. Daubenmire cover frequency plots were conducted pre and post-herbicide application to quantify the success rates of treatments. Ocular assessments were also used to establish treatment efficacy. In total, an average efficacy rate of 87% was calculated for all monitored treatment sites contained within CFLRP boundaries. This efficacy rate

exceeds our goal of 80% as stated in our ecological indicator report submitted in 2014.

Risk assessments were carried out at five CFLRP timber harvest projects in 2015. A total of 252 acres were monitored to determine the current and potential impact the projects have on invasive plant species introduction and spread. A general field data form, rangeland health evaluation and noxious weed risk assessment were conducted in each timber unit within the five projects. A summary of the findings is listed in the table below.

Project Name/Type	# of units monitored	acres monitored	Species of concern	Notes
Lockhart II/Pre-harvest assessment	13	84	Oxeye daisy	Northern units contain a high risk of spread; southern units have moderate risk of spread and introduction
7N/Pre-harvest assessment	19	86	Oxeye daisy	Overall low risk, with a few units of high risk. Travel vectors present the greatest risk for invasive spread
Naturita Fuels/Pre-harvest assessment	9	36	Sulfur cinquefoil	Low risk, travel vectors into and out of plots greatest opportunity for spread
Smokehouse/Post-harvest assessment	2	20	Oxeye daisy	Moderate risk, opened canopy, disturbed soil and equipment will be factors for spread
Sawmill/Post-harvest assessment	8	26	Oxeye daisy	Moderate risk, opened canopy, disturbed soil and equipment will be factors for spread

### Project: Spruce Regeneration in Response to Silvicultural Treatments

Dr. Seth Ex at Colorado State University and Todd Gardiner at the Grand Mesa, Uncompahgre, and Gunnison National Forests collaborated in establishing a long term spruce regeneration monitoring study on the Uncompahgre Plateau. This project was part of the Colorado Forest Restoration Institute's 2015 monitoring scope of work for the Uncompahgre Plateau Collaborative Forest Restoration Project. Our goal was to gain insight into the effects of opening size and slash treatment on Engelmann spruce regeneration success using the group selection method. We sowed seed and planted seedlings in spring of 2015 in permanent plots located at various distances between 0.5-1.5 tree lengths from the north and south edge of three large openings. Distance from edge was taken as an analogue for opening size. Plots had experimental slash treatments that consisted of mineral soil exposure with no slash, with 12 tons ac-1 of slash and with 16 tons ac-1 of slash. This study used a randomized, replicated design with seeded and unseeded controls.

Data from the 2015 growing season show that there was a positive relationship between slash loading and spruce seed germination success regardless of distance from edge, and that germination success was greater near the south edge of openings. Germination success decreased with increasing distance from the south edge of openings to a minimum at 1.5 tree lengths and was constant at greater distances. These results indicate that shade from mature trees at the south edge of openings improves germination success even when slash loads are relatively high, which implies that moisture availability and / or high daytime temperatures continue to limit spruce seed germination and first year survival even when there is considerable microsite protection. Preliminary analysis of

data from temperature sensors installed on a subset of plots suggests plots with no slash may have reached temperatures sufficiently high to cause heat injury to germinates. Management recommendations based on the first year of data from this monitoring project include: 1) creating openings < 1.5 tree lengths in diameter so that beneficial effects of shading from edge trees ameliorate microsite conditions throughout openings, and 2) retaining > 16 tons ac-1 of slash to help protect germinates from drying and / or high temperatures.

**Project: Calamity Basin Hydro-axe**

This project successfully treated 677 acres of ponderosa pine and mixed mountain shrub. This area was a ponderosa pine plantation that was planted in the late 1960’s. This stand has never been thinned and was considerably overgrown. This current state of the stand was a wildfire hazard and was not providing wildlife habitat at its full potential. This project utilized Fecon-head mastication equipment to thin the existing pine stand by about half. This pine thinning dramatically opened the understory, which was almost completely shaded out by the density of this stand. This more open understory will promote the growth of grasses, forbs and the various shrub species that are found in the area. The mastication also targeted over-grown shrub species adjacent to the pine stand such as Gambel’s oak and sage. This will initiate new growth on these shrubs, reduce the threat of fire in this vegetation type and will provide a diverse age-class of forage for big game species in the area.

Before and after pictures are included in the document were taken of treatment areas. Multiple photo points have been established throughout the project area and will be re-taken over the next several years. There are also several vegetation line-intercept/Daubenmire transects that were designated and data was collected before treatment. Data will be collected at these transects again in 2016 and every three years in the future.

In addition to these monitoring efforts, the Forest Service invasive weeds program will monitor this area in order to assess if noxious weeds have spread from the treatment. Any new populations of noxious weeds will be identified and treated with the goal of achieving at least 80% efficacy rate.

**6. FY 2015 accomplishments**

<b>Performance Measure</b>	<b>Unit of measure</b>	<b>Total Units Accomplished<sup>12</sup></b>	<b>Proposal Goals Measured</b>	<b>Total Treatment Cost (\$)</b>	<b>Type of Funds (CFLR, Specific FS BLI, Partner Match)<sup>13</sup></b>
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	n/a	0	Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN
Acres of forest vegetation established FOR-VEG-EST	Acres	0	n/a	0	Acres of forest vegetation established FOR-VEG-EST

<sup>12</sup> Units accomplished should match the accomplishments recorded in the Databases of Record.

<sup>13</sup> Please use a new line for each BLI or type of fund used. For example, you may have three lines with the same performance measure, but the type of funding might be two different BLIs and CFLR/CFLN.

<b>Performance Measure</b>	<b>Unit of measure</b>	<b>Total Units Accomplished<sup>12</sup></b>	<b>Proposal Goals Measured</b>	<b>Total Treatment Cost (\$)</b>	<b>Type of Funds (CFLR, Specific FS BLI, Partner Match)<sup>13</sup></b>
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,471	\$744,584 \$308,896 \$473,600 \$30,540 \$90,000	CFTM CFLN CFVW CFWF CFHF	Acres of forest vegetation improved FOR-VEG-IMP
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	800	\$109,000 \$8,724 \$28,300	CFLN CWFS CFVW	Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	n/a	0	Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	451	\$109,000	CFLN	Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	0	n/a	0	Acres of lake habitat restored or enhanced HBT-ENH-LAK
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	0	n/a	0	Miles of stream habitat restored or enhanced HBT-ENH-STRM
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	3,864	\$308,896 \$94,000 \$90,000 \$219,749 \$885,010 \$120,651	CFLN CFTM CFHF CFWF CFVW NFXN	Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR
Acres of rangeland vegetation improved RG-VEG-IMP	Acres	7,278	\$17,337	BDBD	Acres of rangeland vegetation improved RG-VEG-IMP
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	n/a	n/a	n/a	Miles of high clearance system roads receiving maintenance RD-HC-MAIN

<b>Performance Measure</b>	<b>Unit of measure</b>	<b>Total Units Accomplished<sup>12</sup></b>	<b>Proposal Goals Measured</b>	<b>Total Treatment Cost (\$)</b>	<b>Type of Funds (CFLR, Specific FS BLI, Partner Match)<sup>13</sup></b>
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	n/a	n/a	n/a	Miles of passenger car system roads receiving maintenance RD-PC-MAINT
Miles of road decommissioned RD-DECOM	Miles	0	n/a	0	Miles of road decommissioned RD-DECOM
Miles of passenger car system roads improved RD-PC-IMP	Miles	0	n/a	0	Miles of passenger car system roads improved RD-PC-IMP
Miles of high clearance system road improved RD-HC-IMP	Miles	n/a	n/a	n/a	Miles of high clearance system road improved RD-HC-IMP
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	0	n/a	0	Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD
Miles of system trail maintained to standard TL-MAINT-STD	Miles	79.5	\$8,126 \$106,831	CMTL CMXN	Miles of system trail maintained to standard TL-MAINT-STD
Miles of system trail improved to standard TL-IMP-STD	Miles	12.4	\$8,126 \$106,831	CMTL CMXN	Miles of system trail improved to standard TL-IMP-STD
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles	0	n/a	0	Miles of property line marked/maintained to standard LND-BL-MRK-MAINT
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	1,418	\$744,584 \$308,896 \$529,600 \$90,000	CFTM CFLN CFVW CFHF	Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC
Volume of Timber Harvested TMBR-VOL-HVST	CCF	5,518	n/a	n/a	Volume of Timber Harvested TMBR-VOL-HVST

<b>Performance Measure</b>	<b>Unit of measure</b>	<b>Total Units Accomplished<sup>12</sup></b>	<b>Proposal Goals Measured</b>	<b>Total Treatment Cost (\$)</b>	<b>Type of Funds (CFLR, Specific FS BLI, Partner Match)<sup>13</sup></b>
Volume of timber sold TMBR-VOL-SLD	CCF	11,614	\$744,584 \$308,896 \$529,600 \$90,000 \$67,040	CFTM CFLN CFVW CFHF SSSS	Volume of timber sold TMBR-VOL-SLD
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	0	n/a	0	Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	3,268	\$308,896 \$94,000 \$562,824 \$73,633 \$885,010	CFLN CFTM CFHF CFWF CFVW	Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	2,756		Note: Cost displayed under FP-FUELS-NON-WUI reflects total cost (layout, execution and administration) of treatments designed to reduce fuels in WUI and non-WUI.	Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI
Number of priority acres treated annually for invasive species on Federal lands SP-INVSP-FED-AC	Acres	0		0	Number of priority acres treated annually for invasive species on Federal lands SP-INVSP-FED-AC
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres	0		0	Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC

Performance Measure	Unit of measure	Total Units Accomplished <sup>12</sup>	Proposal Goals Measured	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>13</sup>
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	n/a	0	Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN
Acres of forest vegetation established FOR-VEG-EST	Acres	0	n/a	0	Acres of forest vegetation established FOR-VEG-EST
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,471	\$744,584	CFTM	Acres of forest vegetation improved FOR-VEG-IMP

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

The table below provides a summary of accomplishments through 2015 as a comparison of the stated goal in the 2010 project proposal. A detailed description tied to goals and objectives and desired outcomes for the project are also discussed below.

**Treatment Tracking by Type per year**

Accomplishment by Type	Proposed treatment amounts (unit)	FY 10 Actual Amount	FY 11 Actual Amount	FY 12 Actual Amount	FY 13 Actual Amount	FY 14 Actual	FY 15 Actual Amount	Treatment Total Units and (%)
Mixed Conifer	11,000 Acre	1089	1681	487	48	668	1073	5,046 (46)
Ponderosa Pine	15,000 Acre	300	3158	511	1003	554	3086	8,612 (57)
Sage	1,800 Acre	0	0	322	1,043	749	1400	2,124 (118)
Pinyon Juniper	2,500 Acre	0	445	494	1248	554	3158	4,141 (166)
Oak	7,000 Acre	0	490	0	2121	1,371	736	5,769 (82)
Aspen	11,000 Acre	0	800	86	1,352	66	645	2,974 (27)
Spruce/ Fir	4,000 Acre	171	285	141	350	1,063	0	2,655 (66)
Riparian	320 Acre	0	320	50	0	0	0	370 (116)
Roads Decommis-sioned	130 Mile	32.5	4	30	36	13	3,678	115.5 (89)
Mech-anical Treatments	27,300 Acre	1381.4	2874	1,494	3,806	3,012	945	16,245 (60)
RX/ Managed Fire	55,000 Acre	1893	4052	0	318	1,071	92	7,208 (13)
Trail	100 Mile	10	268	48	49	84	300	551 (551)
Native Species	8100 Acre	401	475	201	215	0	800	1,592 (20)

Accomplishment by Type	Proposed treatment amounts (unit)	FY 10 Actual Amount	FY 11 Actual Amount	FY 12 Actual Amount	FY 13 Actual Amount	FY 14 Actual	FY 15 Actual Amount	Treatment Total Units and (%)
Invasive Weeds	6,800 Acre	457	1655	222	392	5,028	11,614	4,271 (63)
Timber Volume Sold (CCF)	99,000 CCF	6,100	12,777	5,115	10,514	133	0	51,148 (52)
Power lines Treatments	650 Acre	117	472	482	0	0	0	1,071 (165)
Stream	30 Miles	0	1	2	15	668	1073	18 (60)

**Table - Acres of treatment proposed in the Uncompahgre Project area from our 2010 proposal versus actual accomplishments by fiscal year.**

**8. Describe the total acres treated in the course of the CFLR project** (cumulative footprint acres; not a cumulative total of performance accomplishments). What was the total number of acres treated?<sup>14</sup>

Fiscal Year	Total number of acres treated (treatment footprint)
Total footprint from start year through FY15	31,469 acres
FY10, FY11, FY12, FY13, FY14, and FY15 (as applicable- projects selected in FY2012 may will not have data for FY10 and FY11; projects that were HPRP projects in FY12, please include one number for FY12 and one number for FY13 (same as above))	FY10 – 9,528 acres FY11 – 3,792 acres FY12 – 1,967 acres FY13 – 4,124 acres FY14 – 4,783 acres FY15 – 7,275 acres

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

For each Fiscal year I have summarized treated acres for Timber Sales, Service Contracts, Reforestation, and Fuels (Pile and Under burning), to show the total number of acres treated.

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

Currently we are on-track with 12 of the 17 indicators identified in our 2010 proposal. Areas of deficiency by vegetation type include treatment of mixed conifer and aspen cover types. The aspen forest type is complicated because the mixed conifer and spruce/fir treatments almost always include aspen treatment. Aspen is present across most stands categorized as conifer on the Uncompahgre Plateau. Treatment of pure aspen stands is behind because Delta Timber (our sole aspen mill) closed. The use of prescribed fire continues to lag behind expectations due to the lack of suitable burn windows. To date we are at 13% of our stated 2010 goal. Timber volume sold is also slightly behind schedule at 52% of the 2010 goal. Timber volume goals previously set were not based on stand exam data, and treatments are yielding slightly less volume per acre than previously anticipated.

In 2014, the project was behind on 9 of the 17 indicators. In 2015 we were able to get back on track on 3 indicators due to an infusion of additional money from partners and the Regional and Washington Office. As in 2015, several contracts being prepared in 2016 to include additional “bid items” that can easily be modified to complete additional

<sup>14</sup> This metric is separate from the annual performance measurement reporting as recorded in the databases of record. Please see the instructions document for further clarification.

work. Currently we have the need and capacity to accommodate an additional \$435,000 above current funding levels.

#### 10. Planned FY 2017 Accomplishments<sup>15</sup>

Performance Measure Code <sup>16</sup>	Unit of measure	Planned Accomplishment	Amount (\$)
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	n/a
Acres of forest vegetation established FOR-VEG-EST	Acres	0	n/a
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,471	\$744,584 \$308,896 \$473,600 \$30,540 \$90,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	800	\$109,000 \$8,724 \$28,300
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	n/a
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	451	\$109,000
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	n/a
Acres of forest vegetation established FOR-VEG-EST	Acres	0	n/a
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,471	\$744,584 \$308,896 \$473,600 \$30,540 \$90,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	800	\$109,000 \$8,724 \$28,300
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	n/a

<sup>15</sup> Please note that planned accomplishments are aggregated across the projects to determine the proposed goals for the program's outyear budget justification. These numbers should reflect what is in the CFLRP work plan, with deviations described in question 12.

<sup>16</sup> Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2017 is available. Use actual planned funding if quantity is less than specified in CFLRP project work plan.

<b>Performance Measure Code<sup>16</sup></b>	<b>Unit of measure</b>	<b>Planned Accomplishment</b>	<b>Amount (\$)</b>
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	451	\$109,000
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	n/a
Acres of forest vegetation established FOR-VEG-EST	Acres	0	n/a
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,471	\$744,584 \$308,896 \$473,600 \$30,540 \$90,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	800	\$109,000 \$8,724 \$28,300
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	n/a
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	451	\$109,000
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	n/a
Acres of forest vegetation established FOR-VEG-EST	Acres	0	n/a
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,471	\$744,584 \$308,896 \$473,600 \$30,540 \$90,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	800	\$109,000 \$8,724 \$28,300
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	n/a
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	451	\$109,000
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	n/a
Acres of forest vegetation established FOR-VEG-EST	Acres	0	n/a

Performance Measure Code <sup>16</sup>	Unit of measure	Planned Accomplishment	Amount (\$)
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,471	\$744,584 \$308,896 \$473,600 \$30,540 \$90,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	800	\$109,000 \$8,724 \$28,300
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	n/a
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	451	\$109,000
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	n/a
Acres of forest vegetation established FOR-VEG-EST	Acres	0	n/a
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,471	\$744,584 \$308,896 \$473,600 \$30,540 \$90,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	800	\$109,000 \$8,724 \$28,300
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	n/a
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	451	\$109,000
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres	0	n/a
Acres of forest vegetation established FOR-VEG-EST	Acres	0	n/a
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,471	\$744,584 \$308,896 \$473,600

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

The Forest continues to implement the Escalante Project NEPA decision completed in 2013. This decision will provide most of the stewardship contracting and agreement opportunities through 2021 but the forest desires to accelerate treatments to complete all planned work within the 10-year CFLR window. This would require \$400,000 to \$600,000 of additional funding on an annual basis. Other projects will require NEPA but most can be accomplished through a Categorical Exclusion.

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

The 2016 and 2017 program of work exceeds what was described in our 2010 proposal since the Forest described to accelerate the scope and scale of treatment as discussed previously.

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

<http://uplandscape.org/>

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

See previous discussions in various sections of this report.

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

2015 press releases can be found at <http://www.fs.usda.gov/detail/gmug/news-events/?cid=STELPRD3835762>. Additional information is also available at the UP website: <http://uplandscape.org/>

**Signatures:**

Recommended by (Project Coordinator(s)):  /s/ Calvin C. Speas\_\_\_\_\_

Approved by (Forest Supervisor(s))<sup>17</sup>:  /s/ Lee Ann Loupe (for Scott G. Armentrout)\_\_\_\_\_

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

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<sup>17</sup> If your project includes more than one National Forest, please include an additional line for each Forest Supervisor signature.