

**CFLR Project (Name/Number): Southwestern Crown Collaborative National Forest(s): Flathead, Lolo, Helena-Lewis & Clark National Forests**

**1. CFLR, Match and Leveraged funds:**

**1a. FY15 CFLR and Matching Funds Documentation**

<b>Fund Source – (CFLN or Collaborative Forest Landscape Restoration National Forest System Lands)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
CFLN14	\$14,464
CFLN15 (NOTE <sup>1</sup> : Total Expenditure in Performance Accountability System (PAS) <sup>2</sup> is \$1,953,380. FIRE TRANSFER took \$143,000 of CFLN this year. These CFLN funds were not invested in SW Crown restoration work. Therefore, \$1,953,380 - \$143,000=\$1,810,380.)	\$1,810,380
<b>Fund Source – (Funds expended from Washington Office funds in addition to CFLR/CFLN)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
NFRR (NOTE: Total Expenditure in PAS is \$1,346,821. FIRE TRANSFER took \$110,000 of CFLN this year. These CFLN funds were not invested in SW Crown restoration work. Therefore, \$1,346,821 - \$110,000=\$1,236,822.)	\$1,236,822
<b>Total FY 15 CFLR Investments (55% Total Investments)</b>	<b>\$3,061,666</b>

<b>Fund Source – (FS Matching Funds)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
BDBD (Brush Disposal)	\$11,078
CMRD (Roads-Capital Improvement / Maintenance)	\$11,875
CMTL (Trails – Capital Improvement / Maintenance)	\$230,578
CWF2 (Co-Operative Work Non-Agreement Based)	\$83,773
CWK2 (K-V Regional Projects)	\$39,621
CWKV (Cooperative Work, KV)	\$38,869
NFXN (NFS Nonfederal External Reimbursement)	\$10,344
RIRI (Restoration of Improvements – Forest Lands)	\$0
RTRT (Reforestation Trust)	\$6,618
SPFH (Forest Health Management Federal Lands)	\$0
SSSS (Stewardship Contracting)	\$23,286
WFHF (Hazardous Fuels Reduction)	\$286,139

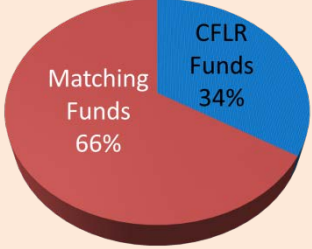
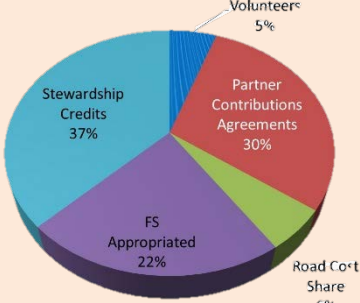
<b>Fund Source – (Funds contributed through agreements)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
	<b>\$1,174,026</b>
<b>Fund Source – (Partner In-Kind Contributions)</b>	<b>Total Funds Expended in Fiscal Year 2015(\$)</b>
	<b>\$181,288</b>

<sup>1</sup> A total of \$253,000 of funds appropriated for use for the SWCC CFLR project was expended through FIRE TRANSFER. From BLI CFLN \$143,000 were transferred and \$110,000 from NFRR supplemental CFLR funding. Fire Transfer funds are not included in the expenditures for the CFLR program because they were not invested toward meeting the goals of the CFLR program.

<sup>2</sup> Data is from the PAS report 11/3/2015.

Service work accomplishment through goods-for services funding within a stewardship contract

For Contracts Awarded in FY15	Totals
Total amount of stewardship <u>credits charged</u> for contracts awarded in FY15	\$0
Total <u>revised credit limit</u> for contracts awarded in FY15	\$0

For Contracts Awarded Prior to FY15:	Totals
Total amount of stewardship <u>credits charged</u> in FY15	\$457,932
Total <u>revised credit limit</u> for open and closed contracts awarded and previously reported prior to FY15	\$790,846
<p><b>FY 10 – FY 15 Cumulative Distribution of SWCC Implementation and Monitoring Funds</b></p>  <p><b>FY 15 CFLR Match Distribution</b></p>  <p><b>Total FY 2015 Match Funding 45% Total Funding</b></p> <p><b>Total FY 2015 CFLR &amp; Match Funding</b></p>	<b>\$2,555,426</b>
	<b>\$5,617,092</b>

**1b. Narrative and table describing leveraged funds in the Southwestern Crown landscape in FY15.**

Leveraged funds refer to funds or in-kind services that help the project achieve proposed objectives but do not meet match qualifications. Examples include but are not limited to: investments within landscape on non-NFS lands, investments in restoration equipment, worker training for implementation and monitoring, and purchase of equipment for wood processing that will use restoration by-products from CFLR projects.

**Wildland Urban Interface and Non-WUI Fuel Reduction and Forest Restoration Treatments**

Treatment/ Activity/ Item	Location-Ownership	Partner	Leveraged Funds	Fund Source (Tribal, Federal, State, Foundation, Other)
Fuels Mitigation and Forest Restoration on Private Lands	Private	Swan Ecosystem Center	\$332,306	Federal (Thru DNRC); Landowners; Missoula County
Fuels Mitigation and Forest Restoration on Private Lands	Private	Blackfoot Challenge	\$152,260	Landowners
Thinning (8 acres); Pile Burning (195 acres); Broadcast Burning (163 acres); Tree Planting (40,000 trees over 133 acres)	Swan River State Forest (SRSF)	MT DNRC	\$53,026	State
Private Forestry Assistance	Private	MT DNRC	\$6,000	State

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**Invasives & Exotic Treatments**

Treatment/ Activity/ Item	Location-Ownership	Partner	Leveraged Funds	Fund Source (Tribal, Federal, State, Foundation, Other)
Weed Management Treatments	Private	Blackfoot Challenge	\$4,160	Landowners
Verbenone & MCH Distribution to Prevent Beetle Infestation	Private	Swan Ecosystem Center	\$22,900	Private
Weed Management Treatments & Outreach	Private	Swan Ecosystem Center	\$14,167	Private/ Missoula County (50/50)
Verbenone (200 packets) and MCH (342 packets) placement for beetle infestations	SRSF & Private	MT DNRC	\$4,100	State
Noxious Weed Management – Contract & State Application (250 acres treated)	SRSF	MT DNRC	\$13,000	State

**Fish and Wildlife Habitat**

Treatment/ Activity/ Item	Location-Ownership	Partner	Leveraged Funds	Fund Source (Tribal, Federal, State, Foundation, Other)
Wetland Restoration on Private Lands, Outreach & Monitoring; Elk Creek Conservation Area Riparian Restoration	Private	Swan Ecosystem Center	\$60,075	USFWS; Private/State; Missoula County; Landowner; SEC and CSKT
Wetland Restoration on Private Lands, Outreach & Monitoring	Private	Swan Ecosystem Center	\$450	Private/State
Water Stewardship, efficiency and monitoring	Private	Blackfoot Challenge	\$69,958	State/NGO
Wildlife Technician and Carcass removal program	USFS/State/Private	Blackfoot Challenge	\$76,495	NGO/State
Avian Monitoring of Old-growth Maintenance Treatments	SRSF	MT DNRC	\$1,800	State
Fatty Boat Launch; Gate Monitoring; Gate Repair	SRSF	MT DNRC	\$5,721	State

**Recreational Activities consistent with CFLR Objectives**

Treatment/ Activity/ Item	Location-Ownership	Partner	Leveraged Funds	Fund Source (Tribal, Federal, State, Foundation, Other)
Weed Management Treatments	Private	Blackfoot Challenge	\$4,160	Landowners

**Watershed Restoration: Road BMPs, Decommissioning, Storage; Trails; Mine Reclamation**

Treatment/ Activity/ Item	Location-Ownership	Partner	Leveraged Funds	Fund Source (Tribal, Federal, State, Foundation, Other)
Chilly James Water Quality & BMP Planning	USFS/State	Swan Ecosystem Center/USFS	\$44,160	DEQ; Private
Lower Whitetail BMP Restoration; Upper Whitetail CMP Installation; Scout Lake Timber Sale	SRSF	MT DNRC	\$11,300	State

Planning

Treatment/ Activity/ Item	Location-Ownership	Partner	Leveraged Funds	Fund Source (Tribal, Federal, State, Foundation, Other)
Glacier Loon, Cold Jim, Chilly James, Beaver Creek, Centerhorse, Stonewall	USFS	NA	\$1,981,800	USFS
EMRI - Terrestrial Assessment for BSLRP SEC Staff - CFLRP Related Planning Meetings - Luke , Roger and Maria	USFS	EMRI	\$137,800	NGO & USFS
Cilly Cliffs Multiple Timber Sale Project, Goat Rot Flats and Fatty Restoration MEPA Planning Estimates & Field Layout	USFS	Swan Ecosystem Center	\$3,500	Private
Road Inventory on Newly Acquired Lands Wood/Lion Multiple Timber Sale Project MEPA Planning Estimates & Field Layout	SRSF	MT DNRC	\$317,000	State
Road Inventory on Newly Acquired Lands Wood/Lion Multiple Timber Sale Project MEPA Planning Estimates & Field Layout	SRSF	MT DNRC	\$4,000	State
Road Inventory on Newly Acquired Lands Wood/Lion Multiple Timber Sale Project MEPA Planning Estimates & Field Layout	SRSF	MT DNRC	\$7,000	State
<b>Total leveraged funds in the Southwestern Crown landscape FY15.</b>	n/a	n/a	<b>\$3,323,878</b>	n/a

**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.**

**Wildland Urban Interface Fuel Reduction**



Winter commercial and non-commercial thinning in the Horseshoe West project area reduces or eliminates impacts to soils, noxious weed spread or infestation and grizzly bears.

[A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Strategy Implementation Plan \(December 2006\)](#) was established in part, due to an awareness that the development of unnaturally dense, diseased or dying forests, and treatment of wildland fire had created widespread threats to communities. The Southwestern Crown Collaborative set a goal of reducing fuels on 27,000 acres<sup>3</sup> within the Wildland Urban Interface



<sup>3</sup> Please see Question #8 for the actual ‘footprint’ of all restoration activities completed to date within the SW Crown. As described here acres accomplished each year, may be part of multiple activities on the same ground. For example, slashing 10 acres followed by burning the same 10 acres would result in 20 acres of treatments or accomplishments. Funding is allocated per activity/accomplishment – not per footprint.

and we are over half-way to meeting this goal with 14,427 acres treated, including 1,314 acres of fuel reduction in FY15.

The majority of landowners within the Southwestern Crown landscape (SW Crown) live in forested areas near and in between the communities of Condon, Lincoln and Seeley Lake. For the SW Crown, the WUI is defined as an “Intermix Community” because there is no clear line of demarcation between the urban and wildland area. Wildland fuels are continuous within and

**Horseshoe West slashing completed behind a private residence.**



**Burn hand piles in Horseshoe West near private residence.**

outside of the developed area. Several community wildfire protection plans (CWPPs) cover the entire SW Crown, and the Seeley-Swan, Greenough/Potomac, North Powell, and Lincoln Fuels Mitigation Task Forces have been successful in mitigating fuels on private land in their respective areas of concern. This has been, in places, in stark contrast to the dense, fuel intensive stands on adjacent National Forest System Lands.

The SWCC efforts have accelerated and expanded fuel mitigation efforts that were occurring on the Swan Lake, Seeley Lake and Lincoln Ranger Districts.

Horseshoe West project is an excellent example of the WUI fuel reduction work occurring throughout the SW Crown. Private and state land abuts the project area, which much fuel reduction work accomplished on those ownerships. On the north and northwest side of the project area is the Double Arrow Ranch with approximately 800 home lots. South of the project area is the Big Sky Lakes development and state lands about in a section to the East.

Since commercial thinning was completed last winter, which thinned small diameter trees and widened crown spacing, the 20 person District fire crew has been creating burn plans, slashing understory, piling fuels, constructing fire lines where strategically needed and burning. Over 500 acres of this work was completed in FY15. Burning will continue this fall and next spring as burning windows allow.

### **Challenges**

Challenges continue to include getting projects through the NEPA process to have acres available to treat, and getting days with favorable burning windows.

### **Wildfires within SW Crown**

Unlike some areas in the Northwest, 31 fire starts resulted in only approximately 1,022 acres burned within the SW Crown in FY15. The burned acres included a 121 acre fire, Cedar Peak that was managed for resource benefits within the Mission Mountain Wilderness on the Swan Lake Ranger District, Flathead National Forest. The Cedar Peak fire was started by lightning just north of the Upland Mission Mountain prescribed fire completed in FY14. Having in close proximity to the Cedar Peak fire went into planning considerations. Fire managers planned to use the Mission Upland burn as a barrier to the fire spreading to the south if it became a larger fire.

Three fires on the Seeley Lake Ranger District grew together into the Morrell Complex Fire which grew to 870 acres.

**2b. Describe other relevant fire management activities within the project area (hazardous fuel treatments will be documented in Question #6):**

**A. Expenses in wildfire preparedness (WFPR)**

The combined WFPR budget for Fiscal Year 2015 within the SW Crown was \$1,336,739. This includes base salaries, training, resources and associated costs to implement the program on the three Ranger Districts. WFPR covers prevention, detection, preparedness, supplies, and fleet and safety portions of the program. The SW Crown boundary covers approximately 1.4 million acres.

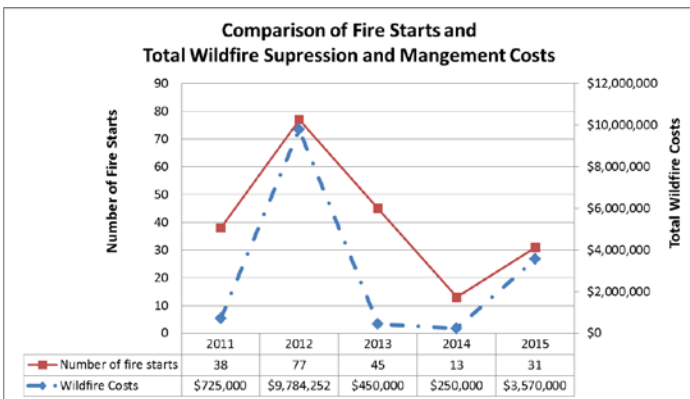
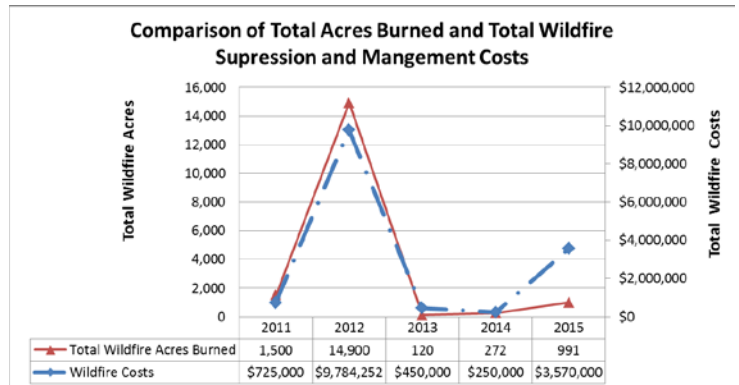
**B. Expenses in wildfire suppression (WFSU)**

In FY15 \$3,570,000 were expended in fire suppression and management of wildfire for resource objectives. Ninety eight percent of those costs were in suppression of the Morrel Complex Fire. Lightning started three fires on August 14th in heavy timber on mostly a southwest aspect. The three fires grew together forming the 870 acre complex. Fire suppression costs for this fire were approximately \$3,500,000. This equals \$3,490 per acre burned.

The Lolo National Forest’s average cost per acre for suppressing fires similar to the Morrel Complex Fire<sup>4</sup> is \$10,702 per acre<sup>5</sup>.

These costs are in stark contrast to the cost of managing prescribed fires outside of wilderness areas which cost between \$225 and \$500 per acre to implement including pre-treatment activities such as slashing and piling.

The 121 acre Cedar Peak fire in the Mission Mountain Wilderness was managed for resource objectives. This means that managers made a strategic choice to use this unplanned ignition to achieve resource management objectives. The cost of managing the Cedar Peak fire was approximately \$70,000 or \$578 per acre.



Potential benefits of this fire include Whitebark Pine, an ESA candidate species. Whitebark Pine can benefit from fire if fuel loading and weather conditions are right. If stands are too dense or there is extreme fire weather mortality of the mature trees can occur.

Cost data collected for CFLR reporting in past years did not distinguish between costs associated with managing to suppress or managing for resource benefits in past years. Of the 17,800 acres of wildfire in the SW Crown since 2011

<sup>4</sup> Suppression costs range widely based on a number of factors including wildfire size, climate, fire environment and characteristics, socio economic risks, and suppression strategies. Fire management scales up or down based on the fires complexity. Type 5 is the least complex fire management, such as initial attack, while Type 1 is the most complex with large number of personnel and equipment assigned to the incident. The Morrel Complex Fire was managed as a Type 4 incident.

<sup>5</sup> LNF Wildfire Cost Matrix, Laura Ward

approximately 16% or 2,900 acres were managed for resource benefits.

Since 2011 there has been a strong correlation between both the number of fire starts and the wildfire acres burned within the SW Crown and overall suppression costs.

**C. Other Hazardous Fuel Expenses Not Captured Above**

Approximately \$168,000 was invested on the Seeley Lake Ranger District in hazardous fuel work not captured elsewhere.

**3. What assumptions were used in generating the numbers and/or percentages you plugged into the TREAT tool?**

For Fiscal Year 2015 we included all matching funds in the ‘Full Project Details’ calculation, rather than just CFLN and FS appropriated dollars expended as done in past years. This will be a more adequate estimate of the full impacts of the SWCC program. We assumed no CFLN was used directly in commercial product production; the costs of sale administration and sale preparation are captured in the next table.

**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>6</sup>
Commercial Forest Product Activities	0	0	0	0
Other Project Activities	39	50	\$1,067,858	\$2,030,685
<b>TOTALS:</b>	39	50	\$1,605,118	\$2,030,685

**FY 2015 Labor Income (FY15 CFLR/CFLN/ WO carryover and matching funding):**

Type of projects	Direct part and full-time jobs	Total part and full-time jobs <sup>7</sup>	Direct Labor Income	Total Labor Income <sup>8</sup>
Commercial Forest Product Activities	34	76	\$1,535,676	\$3,022,876
Other Project Activities	50	64	\$2,120,185	\$2,163,806
<b>TOTALS:</b>	84	140	\$3,655,861	\$5,670,058

**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?

<sup>6</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/submittingproposals.shtml#tools>.

<sup>7</sup> NOTE: An error in the TREAT modeling is being fixed. The current jobs Created or Maintained is less than was created. Updates will occur as soon as this glitch is repaired but to meet internal deadlines this report is submitted without this correction.

<sup>8</sup> Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet are available at <http://www.fs.fed.us/restoration/CFLR/submittingproposals.shtml#tools>.

## Socioeconomic Benefits

Baseline monitoring of local contract capture from the SWCC CFLR program (prior to 2010 and 2010-2011 contracts) was completed in 2012. Next year the Socio-Economic Working Group of the SWCC will monitor local contract capture mid-way through the program, with additional monitoring planned in 2020 and in 2024. Local contractors conducted winter fuel reduction work in Colt Summit and Horseshoe West.

Planning by the Socio-Economic Working group for a Social Survey to gauge local residents' and communities' responses to management and decision-making processes has been in the process for the past 3 years, including FY15. The survey will be a quantitative mail survey, informed by key-informant interviews conducted in 2012 through the SWCC monitoring program. The intent is to use the results of the survey to adapt our management for improved involvement, communication, and prioritization of restoration treatments, and/or continue with actions that are working well.

One of the SWCC partners may implement this survey without the engagement of the Forest Service to move this important monitoring component forward.



Winter commercial thinning in the Colt Summit project area. The sale was purchased by Pyramid Lumber with Hall Wood Processing (Doug Hall) out of Potomac, MT a sub-contractor.



## Community Benefits

In addition to 'restoration contractors' benefiting from CFLR work within the SW Crown other local entities help further their organizations goals by working on National Forest System Lands. In FY15 ten different local organizations partnered with the Forest Service through agreements to implement restoration work within the SW Crown. Eight local organizations partnered with the Forest Service to monitor restoration efforts. This engages the local communities in active management and monitoring of National Forest System Lands in their backyards.

Many projects meet multiple resource objectives, including benefits to the local public and public visiting from afar. Over 77 miles of trails have been maintained entirely to standard and an additional 1,796 miles of trail have had some maintenance work accomplished since the beginning of the SWCC project. As an example the Holland-Gordon Trail #35 had a one log pedestrian crossing and stock ford crossing Holland Creek. In FY15 the bridge was replaced and the bank stabilized at the ford location. Visitors to the popular Holland Lake trail will cross the creek safely and bank erosion and delivery of sediment to the stream will be reduced.



An old ford stock crossing Holland Creek (foreground of photo) in shallow water and gravel bar was stabilized, and the log foot-bridge was replaced in FY15.



Motorized travel is restricted on the Holland-Gordon Trail. Materials, tools, and equipment used to construct the bridge were packed in to the bridge site with stock.



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?

## FY15 Projects

The Monitoring Committee recommended investing \$391,060 of CFLN funding toward ongoing monitoring projects (~10% of FY 2015 CFLR funds) to the SWCC. The Forest Service made final decisions on monitoring project funding.

The majority of CFLN funds were allocated through Partnership Agreements with eight different organizations to conduct the multiparty monitoring. Partners this year included United States Geological Services, Rocky Mountain Research Station, Northwest Connections, Missoula County, MT Discovery Foundation, the University of Montana (Coordinating with InRoads, National Forest Foundation and Bureau of Business and Economic Research), Blackfoot Challenge and the Swan Ecosystem Center. Some funds are used for Forest Service employees to conduct the monitoring. Partners provide a minimum of 20% matching funds for every project, greatly stretching the value of each CFLN dollar. In 2015 \$88,732 of partner match is planned, with an additional \$35,763 Forest Service match.

The following nine monitoring projects were funded in FY 2015.

1. **Youth Forest Monitoring Program.** Please see response to Question 14 for more information about this project.
2. **Social Survey.** In FY15 an extensive literature review was completed to assess how other surveys have been used to inform adaptive management. Work continued in pursuing OMB clearance and survey questions were refined and will be tested.
  - Results – Pending
3. **Local Contract Capture.** Monitoring of CFLRP contracting trends continued in FY15 with an attempt to gain data on subcontractors employed through CFLR contracts. The baseline monitoring effort completed in 2012 compiled prime contractor data only.
  - Results - After considerable effort it was determined that subcontracting data is not captured in a consistent and readily available manner by the Forest Service. This element of the Local Contract Capture monitoring project will not be pursued further.
4. **Herbicide Effectiveness Monitoring.** Fourteen monitoring sites across the SW Crown are established. The plots measure responses of non-native and native species abundance under multiple treatments: herbicide only, seeded (with native species) only, herbicide and seeded, and controls (no seeding or herbicide). Sites have been monitored pre-treatment and up to three years post-treatment including in FY15.
  - Results - Cover of non-native species decreased by 50% first year after treatment and showed a slight increase in the second year. Native species cover decreased by 10% first year after treatment and showed little change in the second year. Increasing the number of days between herbicide application and seeding improved seedling density for some native species. Data analysis and management recommendations were worked on in FY15 and a final report is anticipated in early FY16.
5. **Seed Survival.** This project is monitoring seed mix germination and survival (persisting into the next growing season) on low to mid elevation, moisture stressed sites throughout the SW Crown planning area, including landings, decommissioned roads, and mining rehabilitation sites. We are also evaluating the effectiveness of landing rehabilitation techniques on soil processes and function.
  - Results – Final analysis of initial monitoring data is pending. Site preparation and timing of seeding seem to be determinants to germination success. Timber sale contracts currently require seeding before the contract closes with no specificity to timing. A change in species selected for seed may improve establishment of native forbs.
6. **Integrated Forest Vegetation Plots.** Data from pre-treatment monitoring was cleaned and entered into the Forest Service database.
  - Results – Pending
7. **Road Treatment Effectiveness.** In FY15, treatment sites were established in anticipation of implementing road storage and decommissioning through the Blackfoot Travel Management project. One site on Poorman Creek had post-treatment monitoring this year.

- Results – Pending
8. **Carnivore Monitoring.** Additional track survey, bait stations and DNA monitoring occurred in FY15. Also completed in FY15 was data analysis and report compilation for FY11-FY14 monitoring.
- Early Results - No fisher detections. Lynx detected in 36 unique cells; Track surveys are most reliable for detecting lynx, but bait stations add genetics to help with abundance; 18 individuals detected. Wolverine detected in 38 unique cells; Detections increased substantially over 3 years; 15 individuals detected; Learning to maximize detections & collection of genetic material in efficient manner
  - Adaptive Management - Carnivore monitoring data is being used in multiple planning documents.
9. **GRAIP and PIBO.** The project focuses on roads and sediment to determine if restoration treatments will help meet goals. Assessed if there is support for the conceptual model of the effects of roads on sediment.
- Results - Significantly more sediment is produced per unit area (12x more in 2012-2014) on roads open to vehicles compared with roads closed to vehicles. Only 4% of roads hydrologically connected to streams in contrast to 57% of roads connected in the Cascades. Despite limited sediment production, our GRAIP and PIBO data support the conceptual model linking road networks with instream sediment. Water quality monitoring indicates that at least one stream with poor water quality in the 1970s has recovered substantially in the last 40 years suggesting that recovery occurs with the cessation of intensive logging and road use.
  - Adaptive Management - Road-sediment monitoring data was used when determining the best locations for culvert and road improvements
10. **Monitoring Coordinator.** The coordinator has been invaluable in managing the entire multiparty monitoring program. FY15 work included: completed a Five-Year Monitoring Program Summary; coordinated the Monitoring Committee and its four working groups including and outside groups; hosted a two day Adaptive Management Workshop; continued to develop citizen science opportunities in the landscape; assisted the collaborative in providing input to the Blackfoot Swan Landscape Restoration Project Assessment; coordinated with Line Officers, Regional, Forest and District staff and the SWCC Liaison Officer.

### Monitoring Challenges

- Many scheduled vegetation treatments have been delayed several years by appeals, objections and litigation. Consequently, several of our monitoring projects have been unable to collect post-treatment data and pre-treatment data is no longer current.
- Some sites that received pre-treatment monitoring were later dropped as treatment sites as the NEPA process unfolded.
- Coordinating the timing of monitoring with the timing of treatments, especially when treatments are done by contractors is challenging. For example, coordinating weed spraying to allow for protection of control areas.
- Very high rates of employee turnover within the Forest Service have impacted the consistency and efficiency of our monitoring program.

### Website

The Long-term SWCC Monitoring Plan, project summaries and the Five-Year Monitoring Summary Report are available on the SWCC website: <http://www.swcrown.org/monitoring/>

### 6. FY 2015 accomplishments

To indicate the Performance Measures that correlate directly to a specific SWCC Goal we have added a number in parenthesis behind the performance measure description, for example **(3)**. This number corresponds to the SWCC 10-year goals as listed in Question 7. Some SWCC Goals are not directly tracked in a Forest Service Database and are

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tracked separately. Those accomplishments are not shown here. Some accomplishments in this table were not specifically identified with a target in the SWCC 10-strategy. These accomplishments do not have a number listed after the performance Measure.

Performance Measure	Unit of measure	Total Units Accom <sup>9</sup>	Total Treatment Cost (\$) <sup>10</sup>	Type of Funds (CFLR, Specific FS BLI, Partner Match)
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI (1)	Acres	1,314.0	\$394,200	CFLN NFRR WFHF
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire. FP-NON-WUI (2)	Acres	0	0	-
Acres of forest vegetation improved FOR-VEG-IMP (2)	Acres	48.0	\$7,200	NRFF CFLN
Acres of forest vegetation established FOR-VEG-EST (3)	Acres	700.0	\$70,000	CFLN NFRR RTRT
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC (4)	Acre	149.4	\$317,233	CFLN NFRR Partners
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC (4)	Acres	100.0	\$20,000	SPFH
Acres of lake habitat restored or enhanced HBT-ENH-LAK (4 & 6)	Acres	3,000.0	\$165,000	NFRR CFLN Partners
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR (7)	Acres	2,169.0	\$216,901	NFRR Partners
Miles of stream habitat restored or enhanced HBT-ENH-STRM (8)	Miles	23.8	\$321,211	CFLN NFRR Partners
Miles of high clearance system roads receiving maintenance RD-HC-MAIN (10)	Miles	8.5	\$102,000	CFLN NFRR Partners
Miles of passenger car system roads receiving maintenance RD-PC-MAINT (10)	Miles	11.4	\$136,800	CFLN NFRR Partners
Miles of passenger car system roads improved RD-PC-IMP (10)	Miles	0.1	1,200	CFLN NFRR Partners
Miles of high clearance system road improved RD-HC-IMP (10)	Miles	8.2	\$98,400	CFLN NFRR Partners
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD (12)	Number	2.0	\$460,000	CFLN NFRR Partners
Bridge construction or reconstruction BRDG-CNSTR-RCNSTR (12)	Number	1.0	\$350,000	CMRD NFRR
Miles of system trail maintained to standard	Miles	540.9	\$135,225	CFLN

<sup>9</sup> Please see Question #8 for the actual ‘footprint’ of all restoration activities completed to date within the SW Crown. Acres accomplished each year may be part of multiple activities on the same ground. Funding is allocated per activity/accomplishment.

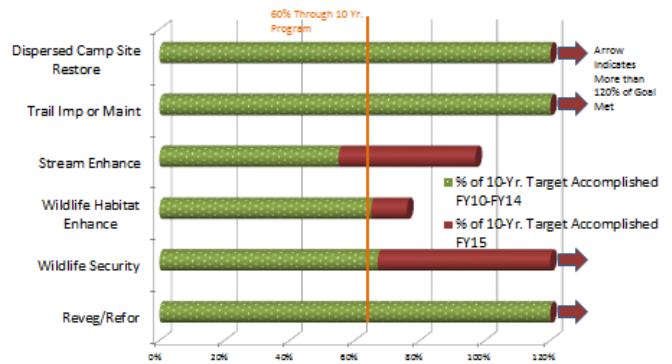
<sup>10</sup> Costs are based on estimated cost per unit.

Performance Measure	Unit of measure	Total Units Accom <sup>9</sup>	Total Treatment Cost (\$) <sup>10</sup>	Type of Funds (CFLR, Specific FS BLI, Partner Match)
TL-MAINT-STD (13)				CMTL NFRR Partners
Miles of system trail improved to standard TL-IMP-STD (13)	Miles	26.1	\$522,000	CMTL NFRR
Volume of timber sold TMBR-VOL-SLD (18)	CCF	2,095.7	\$2,0957	NFRR
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	649.0	\$162,250	NFRR
Volume of Timber Harvested TMBR-VOL-HVST	CCF	12,311.2	\$123,112	CFLN NFRR
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	887.0	\$133,050	Various
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	25.9	Various	Various

**7. FY 2015 accomplishment narrative – Summarize key accomplishments and evaluate project progress.**

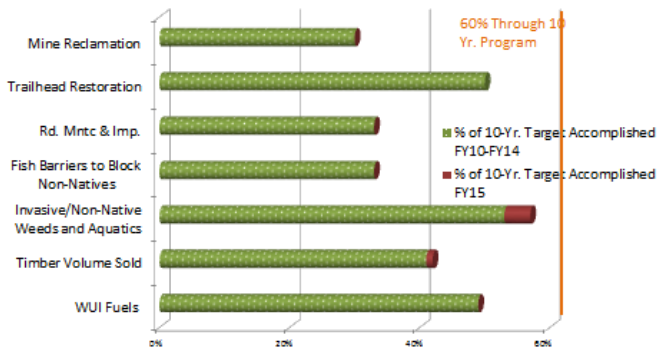
We have exceeded our 10-year goals in several areas and are right on track on others. A number of our planned restoration accomplishments are pending projects in litigation, or projects are delayed because of the time SWCC Forest specialists are investing in objections and litigation, not only for projects within the SW Crown, but elsewhere on their Forests. In spite of this since the start of the SWCC program we have completed over 33 NEPA decisions<sup>11</sup>, including seven Records of Decision/Decision Notices and 26 Decision Memos. We have at least nine more decisions for projects anticipated in the next three years which will move us significantly toward our goals. These include: Chilly James Legacy Roads, Cold Jim, Beaver Creek, Stonewall, Smith Creek Fish Barrier, Blackfoot Non-Winter Travel, Center Horse, a third fish barrier and at least three additional placer mine reclamations.

Meeting or Exceeding 6 SWCC Goals

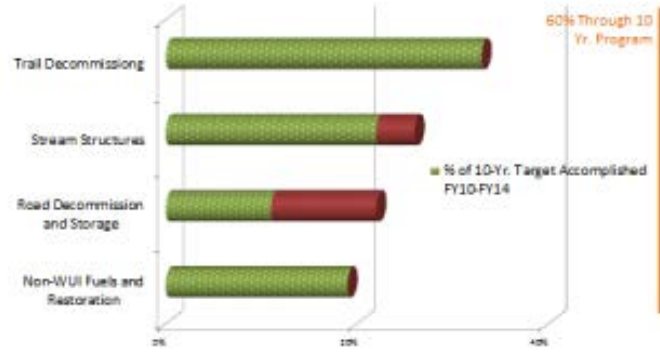


<sup>11</sup> Decisions made in FY15 have not been added to this accounting.

SWCC Accomplishment Relative to 10-yr. Goals



SWCC Accomplishment Relative to 10-yr. Goals



SWCC Goal	SWCC Goal Description	SWCC Target	Accomplished 2010-2015	% SWCC TARGET
1	WUI treated	27,000	14,427	53%
2	Restoration outside of WUI	46,000	8,582	19%
3	Re-vegetation & Reforestation	5,000	11,515	230%
4	Invasive and Exotics	81,600	46,222	57%
5	Fish barriers installed	3	1	33%
6	Lake acres restored	3,000	18,011	600%
7	Wildlife Habitat Improvement	40,000	30,252	76%
8	Miles of stream restored	133	130	97%
9	Wildlife Security acres	9,500	13,200	139%
10	Road BMP work and maintenance	650	242	37%
11	Road storage or decommissioned	400	88	22%
12	Stream Crossings improved	149	38	26%
13	Trail improvement	280	1,979	707%
14	Trailhead improvement	6	3	50%
15	Camp sites rehabilitated	33	46	139%
16	Placer mine reclamation	40	12	30%
17	Trail decommissioned	50	5	10%

SWCC Goal	SWCC Goal Description	SWCC Target	Accomplished 2010-2015	% SWCC TARGET
18	Commercial wood products	200,000 - 320,000 ccf (hundred cubic feet)	109,040	42%
19	Jobs created or maintained annually <sup>12</sup>	180	37 - 239	
19	Labor Income (\$ Million) <sup>13</sup>	9	1.2 - 10.9	

The Restoration Initiative Blackfoot Swan (RIBS), reported on in last year’s annual report has been re-named the Blackfoot Swan Landscape Restoration Project (BSLRP). This project is still in the pre-NEPA stage and the newly established Core Team will be working with the SWCC and other interested parties in FY16 on project development. BSLRP is a new approach in Region 1 to NEPA efficiency and managing at a landscape scale, across boundaries. The BSLRP project, which essentially spans the SW Crown, will focus on management needed to conserve, protect, enhance or restore resiliency of terrestrial and aquatic components in light of ongoing and anticipated disturbance factors, such as fire, insect and disease and climate change. This project is anticipated not only to complete the targets set in the 10-year SW Crown Strategy, but to continue the work of fuel reduction, restoration and resiliency beyond the 10-year CFLR program. The BSLRP project will replace approximately nine EAs or EIS’s that would have been conducted individually by different interdisciplinary teams on the three Forests. A decision for BSLRP is scheduled for FY19, meaning that implementation of the resulting fuel reduction and restoration work is expected to start in 2020.

**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>**

We used FACTS Spatial to calculate the footprint of restoration efforts over the past six years. Not all of the Forests within the SW Crown have entered spatial data into FACTS for accomplishments that have a different data base of record. This is a need the SWCC has identified and we will be working with all relevant specialists in FY16 to include this data in next year’s annual report.

Fiscal Year	Total number of acres treated (treatment footprint) <sup>15</sup>
Total in FY15	83,632
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 – 1,197 FY11 – 16,659 FY12 – 24,814 FY13 – 15,901 FY14 – 13,386 FY15 – 11,675

**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?**

<sup>12</sup> TREAT Model output.

<sup>13</sup> TREAT Model output.

<sup>14</sup> This metric is separate from the annual performance measurement reporting as recorded in the databases of record.

<sup>15</sup> The footprint includes all restoration activities reported in the FACTS database. Some accomplishments, reported in other databases of record, may not be reflected in this footprint estimate. We are working in FY16 to get a more accurate footprint.

We accomplished more than planned in seven of the restoration goals of the SWCC, including: Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production; Timber volume harvested; Miles of stream habitat restored or enhanced; Acres of terrestrial habitat restored or enhanced; Acres of forestland vegetation improved; and Miles of trails maintained and improved.

This year \$253,000 of SWCC CFLR program funds were used in fire transfer. This reduced both our invasive weeds and road work accomplishments, including stream crossings. Concrete costs rose over 25% in one year resulting in bids over planned costs for replacing the Morrell Creek Rd. 4381 bridge. Two culverts planned for removal in Drew Creek were not implemented because the work did not fall into a NEPA categorical exclusion category as originally believed.

Though we harvested more than planned in WorkPlan we only accomplished 11% of our planned Timber Volume Sold due to a delay in the Stonewall Vegetation Management Decision and Cold Jim projects. After an Objection Resolution meeting in July a new Stonewall Vegetation Management FEIS was released the end of August. A Final Decision is planned in FY16. Litigation work on Glacier Loon delayed the decisions for Chilly James and Cold Jim resulting in delay of FNF implementing stewardship restoration for WUI, aquatic habitat, wetlands restoration, and road decommissioning as well as timber sold. Not all planned fuel treatments in the WUI were accomplished due to a narrow prescribed burning window.

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

Performance Measure Code <sup>17</sup>	Unit of measure	Planned Accomplishment	Amount (\$)
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acre	Variable	Various
Acres of forest vegetation improved FOR-VEG-IMP	Acre	40	\$6,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	8100	\$402,800
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acre	102	Various
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acre	3000	\$165,000
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	20	\$270,380
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acre	20,000	Various
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	100	\$1,200,000
Miles of road decommissioned RD-DECOM	Miles	50	\$400,000
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	30	\$6,900,000
Miles of system trail maintained to standard TL-MAINT-STD	Miles	100	\$25,000
Volume of timber sold TMBR-VOL-SLD	CCF	20,000	\$200,000

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

<sup>17</sup> Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2017 is available. NOTE: FY2017 Forest Budgets and Plans are not completed. These estimates are based on needs to meet SWCC Goals and assume NEPA decisions, contracts and agreements can be completed.



Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	900	\$135,000
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	5,034	\$941,358
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acre	6,865	\$2,059,500
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acre	70	\$14,000
Trailhead Restoration <sup>18</sup>	Each	1	\$20,000
Placer Mine Reclamation <sup>19</sup>	Acre	18	\$1,000,000

**11. Planned FY 2017 accomplishment narrative.**

The planned accomplishments are a reflection of both the work that should be shovel ready in FY17 and the work needed to meet our restoration goals.

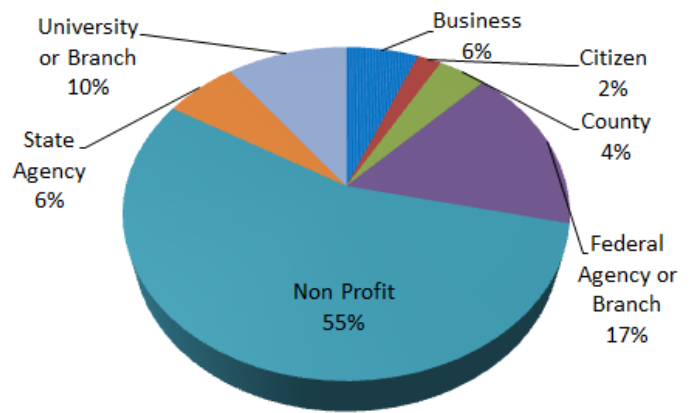
**12. Describe and provide narrative justification if planned FY 2016/17 accomplishments and/or funding differs from CFLRP project work plan.**

Not applicable.

**13. Please include an up to date list of the members of your collaborative. If you have engaged new collaborative members this year, please provide a brief description of their engagement.**

Significant turnover, details, and absences within the Forest Service negatively affected our communications and engagement with the SWCC and vice versa. We are starting FY16 with a full team, fresh eyes, and renewed sense of excitement and pride in the work of the SWCC.

The Forest Service does not manage or control the membership or mailing lists of the SWCC. Engagement in the SWCC Collaborative takes many forms. Some individuals engage in multiple ways, others in just one or two. The different ways interested parties have participated include:



Forty-Nine Different Entities Have Participated in at Least One of More Ways Since 2010

**Voting Members –**

<sup>18</sup> Necessary to meet SWCC 10-year Landscape Restoration Goals

<sup>19</sup> Necessary to meet SWCC 10-year Landscape Restoration Goals

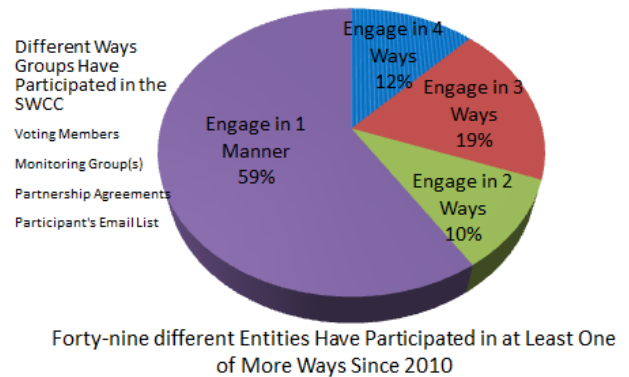
This year the SWCC Charter was amended to exclude Forest Service employees from the voting membership of the SWCC. Generally the SWCC does not routinely vote on matters; the charter encourages working towards consensus on topics with all interested parties. In the 6<sup>th</sup> year of the CFLR program the SWCC has preferred to conduct much of their business, with some parties living 5 or more hours away from each other, via email, conference calls or on field trips.

Currently 11 individuals from 9 different entities are voting members of the Collaborative. This is a considerable reduction from past years. Members are from the following groups: The Wilderness Society, Swan Ecosystem Center, University of Montana, Waypoints West, Individual Citizens, Blackfoot Challenge, Ecosystem Management Research Institute, Northwest Connections, and Missoula County.

**Monitoring Committee and Working Groups** – Each of the four working groups communicates with over a dozen individuals each – and there is overlap with some individuals engaged in multiple groups. Seventeen different organizations are involved with the Monitoring Committee and its Working Groups.

**Partnership Agreements and Volunteers** – Twenty-eight organizations have partnership agreements with the Forest Service to implement or monitor restoration projects. An additional five engage in volunteer activities.

**SWCC Participants Mailing List** – Of the forty-nine organizations involved in the SWCC eleven only engage through the participant’s mailing list. Many individuals and groups want to be informed of SWCC activities and opportunities and may not be engaged in other ways with the SWCC. These individuals receive all email notifications/communications through the SWCC Participants email list. Currently 130 individuals from thirty different organizations are on the mailing list.



**14. How has your project increased support from partners in terms of in-kind contributions and funding?**

Partners Have Increased in Number and Contributions

Since 2010 when we had partnership agreements with six wonderful partners, we have grown our capacity and built relationships with 30 different organizations through the partnership program; a 500% increase. In 2010 Partners contributed \$402,674 to restoration and monitoring within the SW Crown. Since then \$3.7 million dollars have been invested or obligated by our partners through agreements – meeting our mutual goals. This equates to well over half a million dollars every year contributed by non-Forest Service partners. Volunteers are also very active within the SW Crown.

**Fuel Reduction**

Fuel reduction work like the work completed this year, See Question # 2a is of utmost interest to many people in the communities within the SW Crown.

**Engaging Citizens and Youth**

Members of the SWCC Monitoring Committee have expanded existing efforts and partnerships through “citizen science” monitoring as a means to engage and inform local communities about climate and natural resource issues. Partners are now working with schools in four different communities to monitor stream and forest conditions. SWCC partners received a grant of \$20,000 to grow and maintain this program in 2015.

In June and July 2015, five high school students from the Youth Forest Monitoring Program (YFMP) collaborated with the SWCC to do citizen science monitoring in the Lincoln area. For the second year in a row, students from the Lincoln team learned how to do Rapid Forest Assessment in the Stonewall Project area. They took tree measurements, tree succession, ground cover, and hiding cover in locations both in and out of the proposed treatment area. Students enjoyed learning new protocol, and interacting with some great partners from the University of Montana and the Blackfoot Challenge. In addition, the students were able to establish about a dozen sites which they will be able to return to, once treatment has been completed, to look for interesting changes on the landscape.

YFMP students also continued stream monitoring on Poorman Creek near the Lincoln School. They revisited a permanent monitoring site established by the SWCC and elementary students. Stream discharge and turbidity measurements were collected to continue the project through the summer months, while other students were on vacation. YFMP team members added a few new tests by adding their established protocol including macroinvertebrate surveys, stream bed pebble count, and water chemistry. One surprising find was an 18 inch hair worm – which provided hours of discussion. YFMP students will return to Poorman Creek in summer 2016 to collect data and compare conditions one year later. This project is a great example of how two programs can work together to strengthen their existing monitoring and create new working partnerships. Thanks to the SWCC funding this allowed a group of dedicated students to get outdoors in 2015!



Invasive Weeds – Educating and Providing Resources for the Public to Use Biological Controls

The Swan Lake Ranger District, Flathead National Forest has been successful working with local contractors to treat areas along hundreds of miles of forested roads. The Forest Service weed crew concentrates on challenging treatment sites such as places near or within designated wilderness, places with limited access, and areas with sensitive native plants. The local crew also provides a ‘rapid response’ to treat new infestations.



Of the 34 state-listed noxious weed species, 11 are being treated in the Swan Valley, including spotted knapweed and Canada thistle. Herbicide and biological controls are used to treat both weed species. Drought conditions and the high fire danger in 2015 limited the use of chemical control, and boosted the use of biological agents.



SWCC funding enabled the purchase and release of over 6,000 *Cyphocleonus achates*, knapweed root weevils on a large number of spotted knapweed sites. The root weevils or “cyphos” larvae

feed on the plant roots.



The knapweed seed-head weevil, *Larinus mintus*, was released in the Holland Lake area to help reduce knapweed infestation in a site where the native Howell’s gumweed is found. The sensitive plant species grows in places where knapweed also thrives, such as in disturbed sites along roadways. Using the seed-head weevil instead of chemical treatment protects the native plant from the effects of herbicide. The weevil larvae feed on the knapweed seed-head damaging the seed before it matures and adults feed on the plant foliage.

A new ‘bug’ was released, the *Hadroplontus litura*, a tiny stem-boring weevil used to control Canada thistle. Monitoring of the release site in the Cold Creek drainage will take place this next year to ensure the weevil’s establishment at the site.



Mark Schlitz of the Montana Land Reliance photographs a knapweed root weevil during a Spotted Knapweed Biocontrol Workshop in Condon.



**Where do these ‘small bugs’ that make such a big difference come from?** Though the Forest Service purchases biocontrol agents from a Bozeman, MT company, the Forest weed program manager in cooperation with others is working hard to establish accessible, productive sites to propagate insects locally. Flathead National Forest worked with West Valley School in Kalispell to build and maintain a root weevil insectary, creating a community service-learning project for students and built in science lessons. Within the next couple of years, weevils raised in the insectary will be used in area weed control. In 2015, the Swan Lake Ranger District built a smaller insectary to also produce

root weevils with plans to invite area teachers and student to participate in the project.

Sponsored by the Montana Land Reliance in cooperation with several partner organizations, a Spotted Knapweed Biocontrol Workshop was held in Condon the workshop invited area residents to learn about biocontrol agents as a tool in the integrated weed management of knapweed. Educational outreach and working with local residents is one example of how groups are helping to meet SWCC objectives to prevent and control invasive species.

Before and during the August 2015 biocontrol workshop, root weevils were released in a gravel pit area near Condon on Forest Service Land. The idea is to create an accessible place for workshop participants and other area residents to collect and use the insects to control weeds on their own land within the Swan Valley. Providing access to healthy biocontrol agents is an important element for continuing a vibrant, successful integrated weed management program.

The insectaries and biocontrol workshop tie right back to the integrated weed management approach using education and engaging community residents, students and teachers to take a more active role in weed prevention and control. The non-profit community group, Swan Ecosystem Center, is often at the center of these efforts including hosting the biocontrol workshop at the Condon Work Center. For the last several years the center has worked in partnership with the Missoula County Weed District to provide Swan Valley landowners with a cost-share funding program to help residents control and treat weeds on their property. These efforts support the SWCC goal of engaging communities and interested parties to take part in the landscape restoration process.



Flathead National Forest Weed Specialist Tris Hoffman shows teachers a knapweed root weevil at the West Valley School insectary.

**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.**

Please see videos, photos, articles, presentations, and reports on the SWCC web site. <http://www.swcrown.org/>

**Signatures:**

**Recommended by:** /s/ Sandrah P. Mack

Sandrah P. Mack, Liaison Officer, USFS

/s/ Cory Davis

Cory Davis, SWCC Monitoring Coordinator, University of Montana

**Approved by:**

/s/ Chip Weber

CHIP WEBER

Forest Supervisor Flathead NF

/s/ Bill Avey

BILL AVEY

Forest Supervisor Helena, Lewis & Clark NFs

/s/ Timothy Garcia

TIMOTHY GARCIA

Forest Supervisor Lolo National Forest

**Reviewed by:**

/s/ Gary Burnett

Gary Burnett

Co-Chair Southwestern Crown Collaborative, Executive Director Blackfoot Challenge

/s/ Anne Dahl

Anne Dahl

Co-Chair Southwestern Crown Collaborative, Executive Director Waypoints