# CFLR Project (Name/Number): Kootenai Valley Resource Initiative – CFLR011

National Forest(s): Idaho Panhandle National Forests

# 1. Match and Leveraged Funds:

## a. FY19 Matching Funds Documentation

Fund Source – (CFLN/CFLR Funds Expended)	Total Funds Expended in Fiscal Year 2019
CFLN19	\$842,256

This amount should match the amount of CFLR/CFLN dollars obligated in the FMMI CFLRP expenditure report. Include prior year CFLN dollars expended in this Fiscal Year.

Fund Source – (Funds expended from Washington Office funds (in addition to CFLR/CFLN) (please include a new row for each BLI))	Total Funds Expended in Fiscal Year 2019
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NFVW	\$559,194

This value (aka "core funds" "in lieu of funds") should reflect the amount expended of the allocated funds as indicated in the program direction but does not necessarily need to be in the same BLIs or budget fiscal year as indicated in the program direction.

Fund Source – (FS Matching Funds	Total Funds Expended in Fiscal Year	
(please include a new row for each BLI)	2019	
BDBD	\$163,672	
CMRD	\$68,233	
CWKV	\$168,512	
NFHF	\$31,421	
NFWF	\$3,747	

This amount should match the amount of matching funds in the FMMI CFLRP expenditure report, minus the Washington Office funds listed in the box above and any partner funds contributed through agreements (such as NFEX, SPEX, WFEX, CMEX, and CWFS) listed in the box below.

Fund Source – (Funds contributed through agreements)	Total Funds Expended in Fiscal Year
	2019
NFXF	\$25,000

Please document any partner contributions to implementation and monitoring of the CFLR project through an income funds agreement (this should include partner funds captured through the FMMI CFLRP reports such as NFEX, SPEX, WFEX, CMEX, and CWFS). Please list the partner organizations involved in the agreement. Partner contributions for Fish, Wildlife, Watershed work can be found in the WIT database.

Fund Source – (Partner In-Kind Contributions)	Total Funds Expended in Fiscal Year 2019
Trail Maintenance & Improvement and Monitoring: Retired Smoke Jumpers, Camp Thunderbird, Keep It Public, Sierra Club, Kootenai Valley Volunteers, Idaho Trails Association	\$227,354
Collaborative Project Meetings: Kootenai Valley Resource Initiative (KVRI)	\$9,120

Fund Source – (Partner In-Kind Contributions)	Total Funds Expended in Fiscal Year 2019	
Noxious Weed Treatment: Boundary County, Idaho	\$1,670	

Total partner in-kind contributions for implementation and monitoring of a CFLR project on NFS lands. Please list the partner organizations that provided in-kind contributions.

Service work accomplishment through goods-for services funding within a stewardship contract (for contracts awarded in FY19)	Totals	
Total <u>revised non-monetary credit limit</u> for contracts awarded in FY19	\$930,289.35	

Revised non-monetary credit limits should be the amount in contract's "Progress Report for Stewardship Credits, Integrated Resources Contracts or Agreements" in cell J46, the "Revised Non-Monetary Credit Limit," as of September 30. Additional information on the Progress Reports is available in CFLR Annual Report Instructions document. Information for contracts awarded prior to FY19 were captured in previous annual reports.

**b.** Please fill in the table describing leveraged funds in your landscape in FY2019. Leveraged funds refer to funds or inkind services that help the project achieve proposed objectives but do not meet match qualifications.

Description of item	Where activity/item is located or impacted area	Estimated total amount
Kootenai River Restoration	Ball Creek Tributary of the	\$1,000,000
work implemented by Kootenai	Kootenai River	
Tribe of Idaho		

## (Optional) Additional narrative about leverage on the landscape if needed:

The Kootenai Tribe of Idaho has been implementing river restoration projects in the mainstem, side channels and tributaries of the Kootenai River to improve morphology, riparian and aquatic habitat conditions for native fish and wildlife species. The Ball Creek Tributary Enhancement Project was implemented during the 2019 construction season (July-November). The project area is located downstream of Bonners Ferry on the westside of the Kootenai River. The Ball Creek Tributary Enhancement Project included restoration work in three distinct reaches of this Kootenai River tributary (upper, middle, and lower) extending 3,500 feet up the creek from the confluence with the Kootenai River.

Biological objectives for the project include the following:

- Provide food web support for focal fish species by improving primary productivity and increasing food sources.
- Enhance migration and holding habitat by increasing pool frequency, adding streambank cover and promoting hydraulic complexity.
- Maintain appropriate spawning substrate.
- Increase availability of juvenile rearing habitat.

Restoration activities included increasing floodplain connection to support riparian and wetland vegetation, installation of large wood structures to introduce roughness and support sediment transport processes, installation of vegetated brush bank structures and planting to improve the riparian corridor, increasing off channel features including side channels, wetland and alcoves, establishing pool-riffle sequences and structures to provide cover, maintain pools and create hydraulic complexity, and fencing to protect riparian and aquatic habitat.

2. Please tell us about the CFLR project's progress to date in restoring a more fire-adapted ecosystem as described in the project proposal, and how it has contributed to the wildland fire goals in the 10-Year Comprehensive Strategy Implementation Plan.

## FY2019 Overview

FY19 Activity Description (Agency performance measures)	Acres
Number of acres treated by prescribed fire	1921
Number of acres treated by mechanical thinning	825
Number of acres of natural ignitions that are allowed to burn under	0
strategies that result in desired conditions	
Number of acres treated to restore fire-adapted ecosystems which are	1,443
maintained in desired condition	
Number of acres mitigated to reduce fire risk	2450

**Please provide a narrative overview of treatments completed in FY19**, including data on whether your project has expanded the pace and/or scale of treatments over time, and if so, how you've accomplished that – what were the key enabling factors? **For projects finishing their tenth year**, if you have any additional insights from your cumulative work over the course of the project please share those here as well.

Fuels treatments for 2019 included the completion of harvest of several timber sale units, related purchaser work or stewardship items including slashing and grapple-piling of surface fuels, as well as force account work such as slashing, piling, pile burning and activity and natural fuels underburning. Our focus was fuels reduction in the WUI and burning for site-preparation for regeneration. Maintenance treatments also occurred and included grazing, pre-commercial thinning and white-pine pruning.

- How was this area prioritized for treatment? What kinds of information, input, and/or analyses were used to prioritize? Please provide a summary or links to any quantitative analyses completed.
  - Implementation of fuels treatments is prioritized based on several factors, including location such as adjacency to private land (WUI), infrastructure, or municipal water supply complexity such as number of resources needed for implementation, upcoming sale closure, timing restrictions (for example, seasonal activity restriction for grizzly bear), urgency for regeneration (i.e. do we need to accomplish site preparation because trees have been ordered?), etc. Other critical considerations include cross-boundary work, such as location of fuels activities adjacent to county 'FireSafe' projects, especially in collaboration to help obtain grant funding for fuels reduction. In regards to mechanical treatment and prescribed fire acres, the primary driver in prioritizing treatment operations is WUI values and private land; the vast majority of all acres treated have occurred in the WUI.
- Please tell us whether these treatments were in "high or very high wildfire hazard area from the "wildfire hazard potential map" (<a href="https://www.firelab.org/project/wildfire-hazard-potential">https://www.firelab.org/project/wildfire-hazard-potential</a>)
  - Were the treatments in **proximity to a highly valued resource** like a community, a WUI area, communications site, campground, etc.?

All treatment areas occurred in a moderate or high hazard area according to the wildfire hazard potential map, and nearly all were within the county defined wildland-urban interface and near communities-at-risk, such as Bonners Ferry, Moyie Springs, Eastport, and Naples. Fuels reduction occurring in the Twentymile and Snow-Way

sale areas were implemented for the protection of the communication site on Black Mountain and the municipal watershed, respectively. Numerous treatments, including mechanical thinning, grapple-piling, pile burning and underburning, also occurred near Brush Lake, a high-use recreation area developed for fishing, mountain biking, hunting, hiking and camping.

• What have you learned about the interaction between treatment prioritization, scale, and cost reduction? What didn't work? Please provide data and further context here.

Due to the sizable amount of public forest land and rural nature of our county and local communities, prioritizing larger treatments in the WUI (specifically near infrastructure such as communication towers, powerlines, and municipal watersheds) likely provides the greatest return on investment. We will always chose a suppression strategy in these areas to protect values; costs to fight fires on steep, rugged terrain, and in dense forests can be staggering. Often, mechanized and specialized equipment and aerial resources (such as helicopters equipped with buckets) are needed to bring fires under control.

Focusing treatments in these areas can provide safe areas for firefighters to take direct action on the ground. Most often, local fires starting or burning into previously treated areas have been brought under control in the initial attack stage – potentially saving hundreds of thousands of suppression dollars.

Mechanical treatments of hazardous fuels – harvest, often followed by slashing, and then piling of fuels – is generally most efficient and cost-effective. The contractor can complete that work, at a lower cost per acre than Force account, and accomplish it immediately. Mechanically treating fuels decreases the short-term risk associated with leaving activity fuels untreated near private property, homes, and infrastructure while the Forest Service otherwise waits on burn windows and tries to prioritize the myriad prescribed burns.

**Please provide visuals if available**, including maps of the landscape and hazardous fuels treatments completed, before and after photos, and/or graphics from fire regime restoration analysis completed locally. You may copy and paste these below or provide a link to a website with these visuals.

Example of fuels reduction completed in 2019 – Leonia Dry-Site Restoration and Fuels Reduction. Approximately 500 acres of natural fuels and activity fuels treated through a combination of timber harvest, slashing of ladder fuels, and underburning.



Figure 1. Before harvest and burning, 2012.



Figure 2. After Treatment (Harvest followed by prescribed fire, 2019)

## **Expenditures**

Category	<u>\$</u>
FY2019 Wildfire Preparedness <sup>1</sup>	\$355,000
FY2019 Wildfire Suppression <sup>2</sup>	\$100,000
The cost of managing fires for resource benefit if appropriate (i.e. full suppression versus managing)	No fires managed for resource benefit in FY19.
FY2019 Hazardous Fuels Treatment Costs (CFLN)	CFLN not used for Fuels Treatments in FY19.
FY2019 Hazardous Fuels Treatment Costs (other BLIs)	BDBD: \$207,894 CWKV: \$58,050 NFHF: \$120,000

How may the treatments that were implemented contribute to reducing fire costs? If you have seen a reduction in fire suppression costs over time, please include that here. *For projects finishing their tenth year*, if you have any additional insights from your cumulative work over the course of the project please share those here as well.

Although we do not have an example from the 2019 fire season, in previous years we experienced wildfires either igniting or burning in to previous fuels treatment units. In all cases, the rate of spread and fire intensity was noticeably reduced where the fire met these areas. Treatments which focus on reducing fuels in the surface, ladder and canopy fuels allow a safe and effective place for firefighters to engage in suppression action. Our treatments are designed such that fuels are best represented by a timber litter 'Fuel Model 8' (Anderson 1982) which results in flame lengths of <2 feet, well within the threshold of direct attack by firefighters on the ground. In recent examples where fire met a past treatment unit – the Bethlehem fire in 2015 and the Mount Hall fire in 2017 – treatment allowed firefighters to bring these fires under control during initial attack and while still small (0.3 acres and 1 acre, respectively).

<sup>&</sup>lt;sup>1</sup> Include base salaries, training, and resource costs borne by the unit(s) that sponsors the CFLRP project. If costs are directly applicable to the project landscape, describe full costs. If costs are borne at the unit level(s), describe what proportions of the costs apply to the project landscape. This may be as simple as Total Costs X (Landscape Acres/Unit Acres).

<sup>&</sup>lt;sup>2</sup> Include emergency fire suppression and BAER within the project landscape. Describe acres of fires contained and not contained by initial attack. Describe acres of resource benefits achieved by unplanned ignitions within the landscape. Where existing fuel treatments within the landscape are tested by wildfire, summary and reference the fuel treatment effectiveness report.

The photo below shows the minimal fire behavior experienced when a wildfire starts in a fuels treatment unit. As a testament to fuels reduction effectiveness, we believe had this area not been treated, extended attack would have been likely, potentially driving suppression costs into the hundreds of thousands of dollars.



Figure 3. Photo depicting the burned and unburned areas and the 'severity', or lack thereof, of the Mount Hall fire. Notice the minimal surface fuels (mostly just live grasses), no ladder fuels, and spaced tree crowns. The intensity of the fire, following a treatment a few years prior (Borderline Stew #125), was so low that a small tree within the perimeter survived (see foreground, middle of photo).

Have there been any assessments or reports conducted within your CFLRP landscape that provide information on cost reduction, cost avoidance, and/or other cost related data as it relates to fuels treatment and fires? If so, please summarize or provide links here: No

## When a wildfire interacts with a previously treated area within the CFLR boundary:

If additional assessments have been completed since the FY2018 CFLRP annual report on fires within the CFLRP area, please note that and provide responses to the questions below. For projects finishing their tenth year, if you have any additional insights from your cumulative work over the course of the project please share those here as well.

Each unit is required to complete and submit a standard fuels treatment effectiveness monitoring (FTEM) entry in the FTEM database (see FSM 5140) when a wildfire occurs within or enters into a fuel treatment area. For fuel treatment areas within the CFLR boundary, please copy/paste that entry here and respond to the following supplemental questions. Note that the intent of these questions is to understand progress as well as identify challenges and what didn't work as expected to promote learning and adaptation.

No wildfire occurrence in a fuel treatment area in 2019, thus, no FTEM monitoring report. There were no events which occurred in 2019 applicable to answering the questions below.

When a wildfire occurs within the CFLR landscape on an area planned for treatment but not yet treated:

No wildfire occurrence in a fuel treatment area in 2019.

Please include acres of fires contained and not contained by initial attack and acres of resource benefits achieved by unplanned ignitions within the landscape, and costs.

- Include expenses in wildfire preparedness and suppression, where relevant
- Include summary of BAER requests and authorized levels within the project landscape, where relevant

There were 11 wildfires within the CFLR landscape during FY19 and all but one of these were contained during initial attack. The 10 fires contained during initial attack were all less than ½ acre, for a total of 1.7 acres. The one fire that escaped initial attack grew to ½ acre and was contained within the first 36 hours.

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.

Some basic background information:

- All biological surveys, and a portion of the unit marking and layout are done with force account crews.
- Prescribed burning (both activity fuel and natural fuels) is accomplished with force account crews.
- A portion of the marking and cruising was done via local contractors.
- Planting and thinning is done primarily via contract, but the contractors are all from out of area.
- We dropped Benewah and Kootenai Counties (ID) and Pend Oreille County (WA) from our impact area, because the mills and contractors are predominantly located in Boundary and Bonner Counties (ID).

## FY 2019 Jobs Supported/Maintained (FY19 CFLR/CFLN/ WO funding):

FY 2019 Jobs Supported/Maintained	Jobs (Full and Part-Time) (Direct)	Jobs (Full and Part-Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	41	55	\$2,106,147	\$2,558,052
Forest and watershed restoration component	6	8	\$103,206	\$137,766
Mill processing component	58	114	\$3,276,307	\$5,044,493
Implementation and monitoring	11	15	\$739,996	\$867,913
Other Project Activities	1	1	\$10,392	\$16,019
TOTALS:	118	192	\$6,236,048	\$8,624,243

# FY 2019 Jobs Supported/Maintained (FY19 CFLR/CFLN/ WO and matching funding):

FY 2019 Jobs Supported/Maintained	Jobs (Full and Part- Time) (Direct)	Jobs (Full and Part- Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	63	84	\$3,191,098	\$3,875,796
Forest and watershed restoration component	23	28	\$329,805	\$486,268
Mill processing component	88	173	\$4,964,049	\$7,643,092
Implementation and monitoring	18	24	\$1,224,230	\$1,435,853
Other Project Activities	1	1	\$15,746	\$24,272
TOTALS:	193	310	\$9,724,929	\$13,465,280

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).

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
Relationship building/collaborative work	CFLRP has provided the opportunity for increased amounts of work to be planned and accomplished within Boundary County. Public participation has increased throughout the life of the project and has resulted in stronger projects that can be supported by the public. The public feels comfortable sharing their ideas with the IDT during project development and has been a valuable source of local insight. This participation has led to improved trails, trailheads, snowmobile parking areas, transportation planning, and vegetation management. A recent example was the work with a local sportsman group with the Forest Service to do monitoring along a stored road system. The low risk drainage structures along this stored road were left in place to allow foot and horse traffic along a popular route. The sportsman group has been monitoring these drainage structures and will report any problems they see in order for the	
0/1	Forest Service to mitigate any issues.	
% Locally retained contracts	Contracting for the restoration work associated with the CFLRP area is done in support of timber sales and also to accomplish restoration work such as AOPs within project areas. Typically, contracts in support of timber sales involve road maintenance, road reconstruction, timber harvest, log hauling, and slash treatment. This work is accomplished almost exclusively by local contractors hired by the purchaser of the sale and local subcontractors hired by the	

		CI ENI Annaul Report. 2013
Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
	contractors. Local contractors and subcontractors get this work because of the relationships they've built through the years and the quality of their work. Contracts offered by the Forest Service to accomplish restoration work are available to any contractor who wishes to bid, but many of the contracts go to local contractors because of their lower mobilization costs and familiarity with local project areas which allow them to bid very competitively.	
Duration of jobs	The logs coming off of timber sales within the CFLRP area help support	
	loggers, log truck drivers, mechanics, and mill workers to name a few. A single project may result in multiple	
	timber sales and the sales may take several years to complete. This	
	steady flow of timber from Forest Service sales combined with timber	
	coming from other ownerships is critical to maintaining the local	
	timber infrastructure and supporting local timber jobs. This consistent	
	source of timber allowed the local mill to modernize their equipment in	
	2012, increase efficiency, stay competitive and continue to employ	
	local workers. The other forms of restoration activities such as road	
	maintenance, culvert replacement,	
	bridge replacement, and AOP replacement provide a consistent	
	source of work for local contractors. These types of restoration contracts	
	are typically accomplished in less than one year's time, but the	
	contractors have invested in the types of equipment and skills	
	necessary to accomplish this type of work and it makes them very	
	competitive when bidding on projects both locally and in	
	neighboring areas.	

Volunteer/outreach participation  Restoration work within the project area is heavily dependent on work accomplished by volunteers and partners. These volunteers and partners are critical to restoring the local trail systems and high mountain lakes. Trails and lake shores are a regular source of sediment to local	Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
waterways unless they are regularly maintained, reconstructed, rerouted, and/or stabilized. This work is not possible without the assistance of volunteers and partners. In 2019, volunteers from across the country joined members of local user groups, conservation groups, and Forest Service employees to restore approximately 343 miles of trail as well as improving plant communities along lakeshores.	Volunteer/outreach participation	area is heavily dependent on work accomplished by volunteers and partners. These volunteers and partners are critical to restoring the local trail systems and high mountain lakes. Trails and lake shores are a regular source of sediment to local waterways unless they are regularly maintained, reconstructed, rerouted, and/or stabilized. This work is not possible without the assistance of volunteers and partners. In 2019, volunteers from across the country joined members of local user groups, conservation groups, and Forest Service employees to restore approximately 343 miles of trail as well as improving plant communities	

5. Based on your project monitoring plan, describe the multiparty monitoring process. You may simply reference your ecological indicator reports here if they adequately represent your multiparty monitoring process. If further information is needed, please answer the questions below.

#### National Indicators

Of the five national indicators (Ecological, Fire Costs, Jobs/Economics, Leveraged Funds, and Collaboration) developed by the Forest Service and partners, two were integrated into the monitoring plan (Jobs/Economics and Ecological).

#### **Local Indicators**

The monitoring plan for the KVRI CFLRP includes the following local indicators and the parties responsible for the monitoring.

## **Social Monitoring:**

• Indicator: Improvement of Skills (Idaho Forest Group; IPNF)

# **Economic Monitoring:**

- Indicator: Number and kind of jobs created (Idaho Forest Group; IPNF)
- Indicator: Income and Wages for Local Contractors and Workers (Industry representatives)
- Indicator: Diversity of Wood Products Produced (Mills)
- Indicator: Value of Wood Products Produced (Industry representatives; Mills)

<u>Ecological Monitoring:</u> The Idaho Panhandle National Forests (IPNF) has the primary responsibilities for ecological monitoring because of quality control with data collection, data entry, and database management. The desire is that over time stakeholders and other volunteers can be trained and participate in the ecological monitoring.

• Vegetation Management Monitoring Elements

- Vegetation Composition
- Vegetation Structure
- Acres treated by prescribed fire
- Aquatic Restoration Monitoring Elements
  - Change in miles of available habitat
  - Reductions in sediment delivery from improvement in roads in Riparian Conservation Areas and unstable land types
- Wildlife Habitat Restoration Monitoring Elements
  - Effectiveness of road management techniques
  - Vegetation as habitat components
  - Changes in road density
  - Changes in Bear Management Unit (BMU) standards
- Recreation Monitoring Elements
  - Miles of trail treated (maintained or reconstructed)
  - Miles of road maintained
  - Number of bridges replaced
- Invasive Species Monitoring Elements
  - Acres of weeds treated

We have just completed the eighth year of project implementation, and have been working to refine our monitoring protocols. We currently have performed or are in the process of performing the following monitoring in the key areas identified in our Monitoring Plan:

- Stocking surveys and post vegetation exams were completed on hundreds of acres within the project area.
   These surveys are the primary mechanism for monitoring vegetation composition and structure following treatment activities. These same areas are utilized to determine effectiveness of the treatment activities in meeting the silvicultural objectives. These areas are also instrumental in demonstrating the pre and post treatment condition of timber stands when visiting project areas with our collaborative.
- The Parker Ridge Fire burned approximately 6,720 acres within the CFLR project area in FY15 and 3,921 of those acres were managed for resource benefit. A monitoring plan has been developed and plots have been established to assess the effectiveness of this fire in meeting the landscape objectives of the CFLR project.
- Recreation staff monitored the condition of the Parker Ridge Trail to assess damages as a result of the 2015
   Parker Ridge fire. All rehab work to trail was completed in FY2018. The trail work, water bars and other trail
   structures will continue to be monitored to determine their effectiveness in reducing the sediment that reaches
   Parker Creek.
- Zone aquatics staff are continuing to track fish populations and the presence of fish barriers within our stream systems and prioritizing opportunities to upgrade these structures. All new and upgraded culverts and AOPs installed throughout the project area will be monitored to determine their effectiveness in providing additional miles of stream habitat.
- Zone wildlife staff have been tracking the changes in overall road densities within each Bear Management Unit (BMU) in the project area. They have also been monitoring the incremental gains, made by the Bonners Ferry Ranger District, in meeting the BMU standards outlined in the Grizzly Bear Access Amendment. All KVRI CFLR projects have the goal of balancing grizzly bear security needs and the need for road access. Currently work is being done in the Keno, Boulder, Grouse, and Bluegrass BMUs.
- Zone staff utilize the INFRA database together with local workplans to monitor and track the current status of the trail system and road system within the project area. This monitoring and planning is instrumental in

- prioritizing and assessing opportunities for improvements to these systems as we plan for each new project. An interactive program was made available on the Idaho Panhandle National Forest webpage in 2016 using data mined from INFRA. This programs allows the public to research the current status of all trails on the Forest.
- Zone weed and range staffs have been continually mapping the known populations of noxious weeds within the
  project area. All data collected is entered into a database to allow for improved monitoring of the size of
  existing populations and the mapping of new populations. This information will allow for improved efforts in
  controlling these populations.
- Zone botanist and weed staff have established a monitoring unit within the Deer Creek project area to measure the effects of differing fuels treatments on existing populations of weed species. The unit will have the same logging prescription, but the fuels will be treated in three different ways. These three subunits will then be monitored relative to existing and new populations of weeds.
- The Forest Range Specialist worked closely with the zone botanist, and regional ecologist to establish stronger monitoring protocols for the bog, fen, and peatland areas within the existing range allotments. This information will allow for better decision making related to grazing within these more sensitive ecotypes.
- The Forest Soils Scientist continually monitors the pre and post condition of down woody debris in logging units throughout our project areas. This allows for better predictions of this material post-harvest and also provides a better prediction of future recruitment from residual standing trees.

Ecological monitoring by Forest Service personnel is a normal part of business in the project area and will continue indefinitely so long as funding allows for capacity. The economic monitoring associated with TREAT can also continue so long as TREAT continues to be supported nationally. The social monitoring will also continue due to the nature of how the Bonners Ferry Ranger District utilizes a collaborative approach to project planning and implementation. This collaborative approach assures regular feedback regarding the social impacts of all work, or lack of work, within the project area (Bonners Ferry Ranger District). Regular meetings with the Boundary County Commissioners is another valuable source of social and economic monitoring information relative to the impacts of work, or lack of work, within Boundary County.

## 6. FY 2019 Agency performance measure accomplishments:

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs)
Acres of forest vegetation established FOR-VEG-EST	Acres	953.4	,
Acres of forest vegetation improved FOR-VEG-IMP	Acres	882	
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	521.1	
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	NA	
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	4,140.1	
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	0	
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	3.8	
Acres of terrestrial habitat restored or enhanced	Acres	370	

Performance Measure   Unit of measure   Total Units   Accomplished   Cost (\$) (Cost (\$) (\$) (C	CFLRP Annual Rep			
Acres   Acre	Performance Measure	Unit of measure		
HBT-ENH-TERR  Acres of rangeland vegetation improved  RG-VEG-IMP  Miles of high clearance system roads receiving maintenance RD-HC-MAINT  Miles of passenger car system roads receiving maintenance RD-PC-MAINT  Miles of passenger car system roads receiving maintenance RD-PC-MAINT  Miles of passenger car system roads improved RD-PC-IMP(RCNSTR)  Miles of high clearance system roads improved RD-PC-IMP(RCNSTR)  Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Miles of system in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  Number of stream crossings constructed to reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD  Miles of system trail maintained to standard TI-MAINT-STD  Miles of system trail improved to standard TI-MAINT-STD  Miles of property line marked/maintained to standard LND-BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-VOL-HVST  Volume of Timber Harvested TMBR-VOL-HVST  Volume of Timber Harvested TMBR-VOL-HVST  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  Acres of hazardous fuels treated outside the willdland/urban interface (WUI) to reduce the risk of catastrophic willdland/urban interface (WUI) to reduce the risk of catastrophic willdland fire FP-FUELS-NON-WUI  Acres of willdland/urban interface (WUI) high pri			Accomplished	• • •
Acres of rangeland vegetation improved RG-VEG-IMP Miles of high clearance system roads receiving maintenance RD-HC-MAINT Miles of passenger car system roads receiving maintenance RD-PC-MAINT Miles of passenger car system roads receiving maintenance Miles Mil				(Contract Costs)
RG-VEG-IMP  Miles of high clearance system roads receiving maintenance RD-HC-MAINT  Miles of passenger car system roads receiving maintenance RD-HC-MAINT  Miles of passenger car system roads receiving maintenance RD-PC-MAINT  Miles of passenger car system roads improved Miles of passenger car system roads improved RD-PC-IMP(RCNSTR)  Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Miles of system straile sompleted if this work is in support of your CFLRP restoration strategy for tracking at the program level.  Number of stream crossings constructed to provide for aquatic organism passage STRM-CROS-MTG-STD  Miles of system trail maintained to standard TL-MAINT-STD  Miles of system trail improved to standard TL-MAINT-STD  Miles of property line marked/maintained to standard LND- BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  Volume of Timber Harvested TMBR-VOL-HVST  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  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 hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres of wildland fire FP-FUELS-WUI  Acres of mitigated FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres  2,450.1				
Miles of high clearance system roads receiving maintenance RD-HC-MAINT Miles of passenger car system roads receiving maintenance RD-PC-MAINT Miles of road decommissioned RD-DECOM * Miles Miles of road decommissioned RD-DECOM * Miles Miles of noad decommissioned RD-DECOM * Miles Miles of noad decommissioned RD-DECOM * Miles RD-PC-IMP(RCNSTR) Miles of high clearance system roads improved RD-PC-IMP(RCNSTR) Miles of high clearance system road improved RD-HC-IMP(RCNSTR) Road Storage While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level. 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 of system trail improved to standard TL-MAINT-STD Miles of property line marked/maintained to standard LND- BIL-MRK-MAINT Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC Volume of timber sold TMBR-VOL-SLD CCF 52,253.8  MILES TIMBR-VOL-HVST Volume of timber sold TMBR-VOL-SLD CCF 50,736.9  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 Acres of wildland/urban interface (WUI) high priority hazardous fuels treated outside the risk of catastrophic wildland fire FP-FUELS-ALL-MIT-NFS Acres Acres 2,450.1		Acres	200.8	
RD-HC-MAINT Miles of passenger car system roads receiving maintenance RD-PC-MAINT Miles of passenger car system roads improved Miles of passenger car system roads improved RD-PC-IMP(RCNSTR) Miles of high clearance system road improved RD-HC-IMP(RCNSTR) Road Storage				
Miles of passenger car system roads receiving maintenance RD-PC-MAINT  Miles of road decommissioned RD-DECOM * Miles  Miles of passenger car system roads improved RD-PC-IMP(RCNSTR)  Miles of high clearance system road improved RD-PC-IMP(RCNSTR)  Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Miles of high clearance system road improved Miles  Road Storage  While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  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 of system trail maintained to standard  TL-IMP-STD  Miles of property line marked/maintained to standard LND-BL-MRR-MAINT  Acres of forestlands treated using timber sales  TMBR-SALES-TRT-AC  Volume of Timber Harvested  TMBR-VOL-HVST  Volume of Timber Harvested  TMBR-VOL-HVST  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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres 2,450.1	,	Miles	54.8	
RD-PC-MAINT  Miles of road decommissioned RD-DECOM * Miles 6.2  Miles of passenger car system roads improved RD-PC-IMP(RCNSTR)  Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Miles of high clearance system road improved Miles 18.2  Miles of high clearance system road improved Miles 18.2  Miles of high clearance system road improved Miles 18.2  Miles of high clearance system road improved Miles of system trial improved if this work is in support of your CFLRP restoration strategy for tracking at the program level.  Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD  Miles of system trial maintained to standard TL-MAINT-STD  Miles of system trial improved to standard Miles 20.7  Miles of system trial improved to standard TL-IMP-STD  Miles of property line marked/maintained to standard LND-BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  Volume of Timber Harvested TMBR-VOL-HVST  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  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-NUI  Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-NUI  Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-NUI				
Miles of road decommissioned RD-DECOM * Miles of passenger car system roads improved RD-PC-IMP(RCNSTR) Miles of high clearance system road improved RD-PC-IMP(RCNSTR) Miles of high clearance system road improved RD-HC-IMP(RCNSTR) Road Storage While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level. 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 of system trail improved to standard TL-MAINT-STD Miles of property line marked/maintained to standard LND- BL-MRK-MAINT Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC Volume of Timber Harvested TMBR-VOL-HVST 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 Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire PF-FUELS-NUI Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-NUI Acres mitigated FP-FUELS-ALL-MIT-NFS Acres Acres 2,450.1	, ,	Miles	78 <i>/</i> I	
Miles of passenger car system roads improved RD-PC-IMP(RCNSTR)  Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Road Storage  While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  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 of system trail improved to standard  TL-IMP-STD  Miles of property line marked/maintained to standard LND-BL-MRK-MAINT  Acres of forestlands treated using timber sales  TMBR-SALES-TRT-AC  Volume of Timber Harvested  TMBR-VOL-HVST  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  Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres  3.364  Miles  11.3  Miles  18.2  Miles  18.2  Miles  18.2  Miles  5.9  Miles  5.9  Miles  278.3  Miles  278.3  Miles  278.3  Miles  20.7  Miles  Namber  1  Acres  CCF  5.9  5.9  5.9  CCF  5.9  5.9  6.7  6.7  6.7  6.7  6.7  6.7  6.7  6		Willes	70.4	
RD-PC-IMP(RCNSTR)  Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Miles 18.2  ROad Storage  While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  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 of system trail improved to standard TL-MAINT-STD  Miles of property line marked/maintained to standard LND-BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres mitigated FP-FUELS-WUI  Acres mitigated FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres  3.364  Miles  5.9  Miles  6.  CCF  5.  S2,253.8  T.TO4  CCF  52,253.8  T.TO4  Acres  3,364  Miles  Acres  2,450.1	Miles of road decommissioned RD-DECOM *	Miles	6.2	
Miles of high clearance system road improved RD-HC-IMP(RCNSTR)  Road Storage While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  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 of system trail improved to standard TL-IMP-STD  Miles of property line marked/maintained to standard LND- BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  Acres of high clearance system road improved Acres of high clearance improved Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres mitigated FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres  3,364  Acres	Miles of passenger car system roads improved	Milos	11 2	
RD-HC-IMP(RCNSTR)  Road Storage  While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  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 of system trail improved to standard TL-IMP-STD  Miles of property line marked/maintained to standard LND-BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  Miles  5.9  Miles  5.9  Miles  5.9  Miles  5.9  Number  1  Pumber  1  CCF  50,73.3  Miles  COF  50,73.3  Acres  3,364  Acres  3,364  Acres  3,364  Acres  3,364  Acres  Acres  3,364	RD-PC-IMP(RCNSTR)	ivilles	11.5	
RO-HC-IMP(RCNSTR)  Road Storage  While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  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 of system trail improved to standard  TL-IMP-STD  Miles of property line marked/maintained to standard LND- BL-MRK-MAINT  Acres of forestlands treated using timber sales  TMBR-SALES-TRT-AC  Volume of Timber Harvested  TMBR-VOL-HVST  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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  3,364  Acres  2,450.1	Miles of high clearance system road improved	Miles	10.2	
While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  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 of system trail improved to standard TL-IMP-STD  Miles of property line marked/maintained to standard LND-BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres 2,450.1	RD-HC-IMP(RCNSTR)	ivilles	18.2	
road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  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 of system trail improved to standard TL-IMP-STD  Miles of property line marked/maintained to standard LND-BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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 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 mitigated FP-FUELS-WUI  Acres mitigated FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres  3.364	Road Storage			
road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.  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 of system trail improved to standard TL-IMP-STD  Miles of property line marked/maintained to standard LND- BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  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-ALL-MIT-NFS  Acres 2,450.1	While this isn't tracked in the USFS Agency database, please provide	Miles	5 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 of system trail improved to standard TL-IMP-STD  Miles of property line marked/maintained to standard LND- BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  Acres  1,704  Miles  20.7  Miles  NA  Acres  1,704  CCF  52,253.8  CCF  50,736.9  Green tons  8,417  BIO-NRG  Acre  2,610  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  2,450.1		ivilles	5.9	
provide for aquatic organism passage STRM-CROS-MTG-STD  Miles of system trail maintained to standard TL-MAINT-STD  Miles of system trail improved to standard TL-IMP-STD  Miles of property line marked/maintained to standard LND- BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI  Acres mitigated FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres  Miles  278.3  Miles  278.3  Miles  20.7  Miles  NA  BIO-N  Miles  NA  CCF  52,253.8  T.704  CCF  52,253.8  T.704  CCF  50,736.9  Green tons  Green tons  8,417  Green tons  8,417  Acres  3,364  Acres  3,364				
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Miles of property line marked/maintained to standard LND-BL-MRK-MAINT  Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  Miles  NA  NA  1,704  CCF 52,253.8  TOR  TOR  TOR  TOR  TOR  TOR  Acres 1,704  TOR  TOR  TOR  TOR  TOR  TOR  TOR  TO	·	Miles	20.7	
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Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  1,704  CCF 52,253.8  1,704  Acres  2,619  Green tons 8,417  Acre 2,610  Acres 3,364  Acres 3,364  Acres 2,450.1		Miles	NA	
TMBR-SALES-TRT-AC  Volume of Timber Harvested TMBR-VOL-HVST  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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  1,704  52,253.8  CCF 50,736.9  Green tons 8,417  Acre  2,610  4cre 2,610  Acres 2,610  Acres 3,364				
Volume of Timber Harvested TMBR-VOL-HVST  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  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 mitigated FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  CCF 52,253.8  52,253.8  Service Solution of Solu	_	Acres	1.704	
TMBR-VOL-HVST  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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  2,450.1				
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  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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  2,610  3,364  2,450.1		CCF	52,253.8	
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  Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres 2,450.1				
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  Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres  8,417  2,610  2,610  Acres  3,364  4 Acres  2,450.1		CCF	50,736.9	
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  Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres  2,610  2,610  3,364  Acres  2,450.1				
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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 mitigated FP-FUELS-ALL-MIT-NFS  Acres 2,610  3,364  2,450.1				
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 mitigated FP-FUELS-ALL-MIT-NFS  Acres  2,450.1	•			
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres  2,450.1		Acre	2,610	
hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres 2,450.1				
wildland fire FP-FUELS-WUI  Acres mitigated FP-FUELS-ALL-MIT-NFS  Acres 2,450.1	, , , , , , , , , , , , , , , , , , , ,			
Acres mitigated FP-FUELS-ALL-MIT-NFS Acres 2,450.1	·	Acres	3,364	
Acres 2,450.1				
	Acres mitigated FP-FUELS-ALL-MIT-NFS	Acres	2.450.1	
Please also include the acres of prescribed fire accomplished   Acres   1921.1			·	
	·	Acres	1921.1	
Number of priority acres treated annually for invasive species				
on Federal lands Acres NA		Acres	NA	
SP-INVSPE-FED-AC				
Number of priority acres treated annually for native pests on	· · · · · · · · · · · · · · · · · · ·	1		
Federal lands Acres NA				
SP-NATIVE-FED-AC		Acres	NA	

Units accomplished should match the accomplishments recorded in the Databases of Record.

- \* RD DECOM not included under this Performance Measure was 1.34 miles of non-system road decom under the Camp Stew Stewardship Sale.
- 7. **FY 2019** accomplishment narrative Summarize key accomplishments and evaluate project progress *not already described elsewhere* in this report. *For projects finishing their tenth year*, if you have any additional insights from your cumulative work over the course of the project please share those here as well. (Please limit answer to three pages.)

## FY2019 Planning and Future Implementation -

The KVRI Forestry Subcommittee, a subset of the parent KVRI collaborative, met frequently in collaborative meetings and field trips during FY2019 in support of project planning on the Bonners Ferry Ranger District. The Forest has strongly emphasized work within the CFLRP area by directing funding and resources to accomplish the NEPA associated with several restoration projects in FY2019. This consisted of NEPA on the Boulder Creek EA, the Camp Robin EA, and the Westside Road Restoration EA. This accelerated effort in FY2019 resulted in signed decision notices for both the Boulder Creek and Camp Robin EAs and the completion of NFMA in the Westside Road project. The Forest has also accelerated the implementation efforts of these NEPA ready projects by prioritizing them in the Forest's 5 year vegetation management plan. This resulted in award of two sales (1 Timber Sale and 1 Stewardship) in FY2019 and three more planned for FY2020. These sales have been designed to accomplish a full suite of restoration activities and to strongly leverage all timber values to help fund those restoration activities. The NEPA Strike Team, Region 1 Timber Strike Team, external contractors, Stewardship Contracting, and Good Neighbor Authority are all being utilized to support the NEPA and implementation of these three projects.

The purpose and need, as identified by the KVRI collaborative group for the Boulder Creek, Camp Robin, and Westside Road Restoration projects, is to:

- 1. Improve and maintain forest health in the ecosystem composition, structure, and diversity of the landscape by providing for tree species and stocking levels similar to historic levels which will better resist insects, diseases and wildfire,
- 2. Improve habitat and forage for big game through vegetation treatments and broadcast burning,
- 3. Enhance the scenic integrity of the area by softening the boundaries of previous harvest units and avoiding straight lines and hard edges when designing treatment areas within these projects, and
- 4. Maximize opportunities to utilize forest products and provide economic opportunity through restoration work.
- 8. The WO (EDW) will use spatial data provided in the databases of record to estimate a treatment footprint for your review and verification. This information will be <u>posted here</u> on the internal SharePoint site for verification *after the databases of record close October 31*.
  - If the estimate is consistent and accurate, please confirm that below and skip this question.
  - **If the gPAS spatial information does NOT appear accurate**, describe the total acres treated in the course of the CFLR project below (cumulative footprint acres; not a cumulative total of performance accomplishments). What was the total number of acres treated?

Fiscal Year	Footprint of Acres Treated (without counting an acre of treatment on the land in more than one treatment category)
FY 2019	25,114.86

Fiscal Year	Footprint of Acres Treated (without counting an acre of treatment on the land in more than one
	treatment category)
Estimated Cumulative Footprint of Acres (2010 or	FY12 – 2,300 acres (from previous annual report)
2012 through 2019)	FY13 – 2,440 acres (from previous annual report)
	FY14 – 5,795 acres (from previous annual report)
	FY15 – 8,263 acres (from previous annual report)
	FY16 – 3,785 acres (database estimate)
	FY17 – 4,546.88 acres
	FY18 – 2,571.52 acres
	FY19 – 25,114.86 acres
	Total Treatment Footprint through FY19 –
	54,816.26 acres

If you did not use the EDW estimate, please briefly describe how you arrived at the total number of footprint acres: what approach did you use to calculate the footprint? NA

9. Describe any reasons that the FY 2019 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? *For projects finishing their tenth year*, if you have any additional insights from your cumulative work over the course of the project please share those here as well. (Please limit answer to two pages).

A very favorable spring burn window coupled with heavy use of forest resources (crews, helicopter, etc.) allowed for accomplishment of nearly 2,000 acres of prescribed fire and nearly 5,800 total acres of fuels reduction in FY2019 compared to our proposed total of 1,550. Burn windows vary greatly year to year and we were fortunate to have a good window and available resources to accomplish this important fuels reduction work.

## 10. \*Project selected in 2012 and 2013 ONLY\* - Planned FY 2020 Accomplishments

Performance Measure Code	Unit of measure	Planned Accomplishment for 2020 (National Forest System)	Planned Accomplishment on non-NFS lands within the CFLRP landscape <sup>3</sup>
Acres of forest vegetation established FOR-VEG- EST	Acres	300	
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	400	
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	3	
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	350	
Miles of road decommissioned RD-DECOM	Miles	2	

<sup>&</sup>lt;sup>3</sup> As we shift to more emphasis on sharing results across all lands within the CFLRP projects – if relevant for your project area – please provide estimates for planned work on non-NFS lands within the CFLRP areas for work that generally corresponds with the Agency performance measure to the left and supports the CFLRP landscape strategy. Give your best estimate at this point; if it's unknown how much work will occur off NFS lands, simply state unknown.

Performance Measure Code	Unit of measure	Planned Accomplishment for 2020 (National Forest System)	Planned Accomplishment on non-NFS lands within the CFLRP landscape <sup>3</sup>
Miles of passenger car system roads improved RD-PC-IMP	Miles	5	
Miles of high clearance system road improved RD-HC-IMP	Miles	15	
Volume of timber sold TMBR-VOL-SLD	CCF	50,000	
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	7,500	
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	300	
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	1,000	

Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2020 is available.

11. \*Project selected in 2012 and 2013 ONLY\* - Planned accomplishment narrative and justification <u>if</u> planned FY 2020 accomplishments and/or funding differs from CFLRP project work plan (no more than 1 page):

FY2020 planned accomplishments are in line with the CFLRP project work plan because we are striving for a consistent delivery of accomplishments in each of the 10 project years. This consistency is critical to our workforce's ability to deliver our program and to the community that relies on the economic benefits generated by this restoration work on the national forest. The Idaho Panhandle National Forest has a strong focus on increased pace and scale across the Forest as it pertains to restoration work. This may result in increased delivery of our timber and fuels projects which may mean that some out-year restoration work in the CFLRP area may exceed our projections FY2020.

- 12. Please include an up to date list of the members of your collaborative <u>if</u> it has changed from previous years. 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.
- No Change to list of members

13. **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. You are welcome to include links or to copy/paste.



Figure 4: Deer Placer Timber Sale Unit 5 Before and After Treatment – Seed Tree harvest with tractor logging and purchaser slashing.



Figure 5: East Fork Stew Timber Sale Unit 4 - Purchaser grapple piling, and Forest Service pile burning.



**Figure 6:** Idaho Buckhorn Burning Project Units 2 and 2A – Using prescribe burning to improve wildlife habitat, reduce natural fuels, and improve whitebark pine habitat. Some pre-burning was done to protect areas of historic interest.



**Figure 7:** Kriest Lightning Unit 17 was planted under the timber sale with KV matching funds, by a planting contractor out of CDA. This contractor is MP Forestry out of Oregon City, Oregon. The larch seedling was planted in a Borderline Stew contract unit with CF.



# Middle Fork Boulder Creek Culvert Replacement Project

2019 Fisheries Accomplishments
Idaho Panhandle National Forests, Northern Region

State: Idaho

## Accomplishment:

Replace an undersized culvert with a bottomless arch to restore proper stream function and upstream access to about 2 miles of beneficial spawning and rearing habitat for westslope cutthroat trout in the Boulder Creek drainage of Boundary County, Idaho.

Project Survey and Design: \$22,000

Project Construction Costs: \$175,300

• Forest Service Contribution: \$172,300

• U.S. Fish and Wildlife Service - \$25,000

An important component limiting healthy function of Boulder Creek is fragmentation of habitat caused by a culvert that impedes fish passage in a tributary stream. Boulder Creek and its tributaries provide critical cold water habitat to the Kootenai River, which commonly reaches non-suitable water temperatures each summer. Improving and maintaining access to these colder tributaries is critical to the persistence of native westslope cutthroat trout found throughout the watershed.



Completed bottomless arch– looking downstream



Undersized culvert inlet pre-replacement.

The Forest Service was the lead for the project completing the environmental analysis, survey and design, and construction contract administration. The U.S. Fish and Wildlife Service provided funding for construction through the National Fish Passage Program. Price Contracting (Stevensville, MT) needed about 4 weeks to complete the construction.

## Signatures:

Recommended by (Project Coordinator(s)): /s/ Matt Staudacher	
Approved by (Forest Supervisor(s)): /s/Jeanne Higgins	
Draft reviewed by (collaborative chair or representative): /Rhonda Vogel KVRI Facilitator	