Kootenai Valley Resource Initiative (CFLR011)

Idaho Panhandle National Forests

1. CFLRP Expenditures, Match, and Leveraged Funds:

a. FY21 CFLN and Matching Funds Documentation

Fund Source – (CFLN Funds Expended)	Total Funds Expended in Fiscal Year 2021
CFLN1118	$55,731.00
CFLN1119	$66,130.00
CFLN1120	$1,007,336.98
CFLN1121	$29,997.61
TOTAL	**$1,159,195.59**

This amount should match the amount of CFLN dollars spent in the FMMI CFLRP expenditure report. Include prior year CFLN dollars expended in this Fiscal Year. CFLN funds can only be spent on NFS lands.

Fund Source – (Forest Service Salary and Expense Match Expended)	Total Funds Expended in Fiscal Year 2021
NSCF1121	$531,775.63
TOTAL	**$531,775.63**

This amount should match the amount of matching funds in the FMMI CFLRP expenditure report for Salary and Expenses. Staff time spent on CFLRP proposal implementation and monitoring may be counted as CFLRP match – see Program Funding Guidance for details.

Fund Source – (Forest Service Discretionary Matching Funds)	Total Funds Expended in Fiscal Year 2021
CFBD	$304,549.13
CFKV	$60,220.49
TOTAL	**$364,769.62**

This amount should match the amount of matching funds in the FMMI CFLRP expenditure report, *minus* any partner funds contributed through agreements (such as NFEX, SPEX, WFEX, CMEX, and CWFS) which should be reported in the partner contribution table below. Per the Program Funding Guidance, federal dollars spent on non-NFS lands may be included if aligned with CFLRP proposal implementation within the landscape.

Fund Source – (Partner Match)	In-Kind Contribution or Funding Provided?	Total Estimated Funds/Value for FY21	Description of CFLRP implementation or monitoring activity	Where activity/item is located or impacted area
Kootenai Valley Resource Initiative (KVRI)	☒ **In-kind contribution** ☐ **Funding**	**$8,269**	Collaborative Project Meetings and field trips: Kootenai Valley Resource Initiative (KVRI)	☒ **National Forest System Lands** ☒ **Other lands within CFLRP landscape: Tribal Lands**

Fund Source – (Partner Match)	In-Kind Contribution or Funding Provided?	Total Estimated Funds/Value for FY21	Description of CFLRP implementation or monitoring activity	Where activity/item is located or impacted area
Boundary County	☒ **In-kind contribution** ☐ **Funding**	$1,670	Noxious Weed Treatment: Boundary County, Idaho	☐ **National Forest System Lands** ☒ **Other lands within CFLRP landscape:**
Trail Maintenance & Improvement and Monitoring: Volunteers included The Idaho Trails Association and Kootenai Valley Volunteers.	☒ **In-kind contribution** ☐ **Funding**	$188,706	Numbers were slightly reduced due to COVID restrictions and local fire activity.	☒ **National Forest System Lands** ☐ **Other lands within CFLRP landscape:**
TOTALS	**Total In-Kind Contributions:** **Total Funding:**			

Total partner in-kind contributions for implementation and monitoring of a CFLR project across **all lands** within the CFLRP landscape. For CFLRP projects under the CFLRP Common Monitoring Strategy, note that this table addresses the core CFLRP common monitoring strategy question, "If and to what extent has CFLRP investments attracted partner investments across the landscapes?"

Service work accomplishment through goods-for services funding within a stewardship contract (for contracts awarded in FY21)	Totals
Total revised non-monetary credit limit for contracts awarded in FY21	$414,341
Revenue generated through Good Neighbor Agreements	**Totals**
	$169,003

Revised non-monetary credit limits should be the amount in contract's "Progress Report for Stewardship Credits, Integrated Resources Contracts or Agreements," the "Revised Non-Monetary Credit Limit," as of September 30. Additional information on the Progress Reports is available in CFLR Annual Report Instructions document.
Revenue generated from GNA should only be reported for CFLRP match if the funds are intended to be spent within the CFLRP project area for work in line with the CFLRP project's proposed restoration strategies and in alignment with the CFLRP authorizing legislation

b. *(OPTIONAL)* Describe additional leveraged funds in your landscape in FY2021, if relevant. Leveraged funds refer to funds or in-kind services that help the project achieve proposed objectives *but do not meet match qualifications*-examples include research (not monitoring) and planning funds.

In 2021, the Kootenai Tribe continued habitat restoration work under the Kootenai River Habitat Restoration Program and the wildlife program, to create, enhance and protect habitat for native fish and wildlife, improve the Kootenai River food web, and enhance resilience of the Kootenai ecosystem. Grants received from Bonneville Power Administration were used to fund the $3 million dollars of work.

The Tribe constructed a habitat restoration project at Elk Mountain Farms, a 1500-acre hops growing operation owned by the Anheuser Busch Corporation. The project included four separate sites along the Kootenai River. Activities included removal reed canarygrass; re-grading the areas the reed canarygrass was removed from to create elevations that can support native vegetation; installation of large wood structures in alcove features; placement of rock substrate patches within the alcove features; creation of floodplain roughness; installation of willow brush trenches, planting and seeding; and construction of individual browse protectors and exclosure fencing.

Also, in 2021 the Tribe completed Phase 2 of the Ball Creek Tributary project. Phase 1 was completed in 2019 and included stream and floodplain restoration work on the lower 3,500 feet of Ball Creek downstream of Westside Road. Phase 2 work was located on the left bank (northeast bank) on The Nature Conservancy's Ball Creek Ranch Preserve. Restoration activities included excavation of a side channel from the upper reach that daylights to the floodplain; excavation of a floodplain berm; planting and seeding; and installation of individual browse protectors and exclosure fencing.

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 wildfire risk reduction goals**.

FY2021 Overview

FY21 Activity Description (Agency performance measures)	**Acres**
Number of acres treated by prescribed fire	1,384
Number of acres treated by mechanical thinning	1,422
Number of acres of natural ignitions that are allowed to burn under strategies that result in desired conditions	0
Number of acres mitigated to reduce fire risk	3,578

Please provide a narrative overview of treatments completed in FY21, 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?

Overall pace and scale for planning of fuels reduction treatments has increased during the life of our CFLRP project. Cumulatively, implementation of these treatments has as well, however, for Rx fire operations there are often limitations on implementation outside our control (clearance for air quality and both short- and long-term weather constraints (seasonal drought), etc.). While ensuring the safety of our workforce provided some challenges due to COVID policy, prescribed fire treatments were up in 2021 as compared to the previous year when more restrictions were in place, despite losing several good burn windows to a regional safety 'stand down' (no burning occurred). Inversely, where mechanical treatments were the focus last year (2020 due to no Rx fire in the region), we had difficulty getting contracts awarded and acres implemented for some mechanical fuels treatments we typically rely on, such as piling and

pre-commercial thinning. Thus, our mechanical fuels treatments were focused on commercial timber harvest and other activities associated with timber sales and stewardship projects, such as slashing and grapple-piling conducted by the contractor. These integrated treatments are valuable in terms of reducing fuels in all layers—crown, ladder, and surface fuels.

As in previous years, our focus was fuels reduction in the WUI and burning for site-preparation for regeneration. Maintenance treatments also occurred and included grazing, as well as some pre-commercial thinning and white-pine pruning associated with stewardship projects.

- **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 and complexity, such as number of resources needed for implementation, upcoming sale closure, or 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. Regarding mechanical treatment and prescribed fire acres, the primary driver in prioritizing treatment operations is WUI values and private land; most 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" (https://www.firelab.org/project/wildfire-hazard-potential)
  - 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, and Naples. Fuels reduction occurring in the Twentymile sale area was implemented for the protection of the communication site on Black Mountain, while treatments in the Kreist Creek area were accomplished in part to protect WUI values including drinking water quality. Numerous treatments, including mechanical thinning, grapple-piling, and pile burning occurred in the Deer Creek and Brushy Mission II project areas, both with high-use recreation values such as camping, hiking, and hunting and both adjacent to private land and homes, as well as the infrastructure to service them (for Brushy Mission II that includes a major north/south highway).

- **What did you learn** 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 choose a suppression strategy in these areas to protect values, and costs to fight fires on steep, rugged terrain, and in dense forests can be staggering. Often, mechanized, 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. Local fires starting or burning into previously treated areas have most often been brought under control in the initial attack stage – potentially saving hundreds of thousands of suppression dollars.

Although prescribed burning is generally considered the most effective treatment for reducing surface fuels while accomplishing numerous ecological objectives, mechanical treatments like harvesting followed by slashing and piling, is generally timelier and more cost-effective. The contractor can complete that work at a lower cost per acre than Force Account and often timelier, one step immediately after the other with a single entry. 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 then tries to prioritize the numerous units needing burned.

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. You may copy and paste or provide a link.

Deer Stew Project – Before and After: The Deer Stew project was authorized from the Deer Creek EA and Decision Notice in 2017. The goals of this project include fuels reduction in the WUI and a landscape which is more resilient to disturbances such as wildfire. Once complete, this project will have treated 4,200 acres through a combination of timber harvest, precommercial thinning, slashing of ladder fuels, piling, and prescribed burning of both activity and natural fuels.

Figure 1 provides an example of fuels conditions in the project area prior to project implementation. Figure 2 is a similar area following harvest and prescribed underburning to reduce canopy, ladder, and surface fuels.

Figure 1. Deer Stew prior to harvest and prescribed burning

Figure 2. Deer Stew Unit 14 after completion of harvest followed by prescribed burning of surface fuels (Spring 2021)

Expenditures

Category	**$**
FY21 Wildfire Preparedness[1]	$360,000
FY21 Wildfire Suppression[2]	$745,000
The cost of managing fires for resource benefit if appropriate (i.e. full suppression versus managing)	No fires managed for resource benefit in FY21
FY21 Hazardous Fuels Treatment Costs (CFLN)	CFLN not used to accomplish fuels treatments in FY21
FY21 Hazardous Fuels Treatment Costs (other BLIs)	BDBD: $261,000 CWKV: $85,000 NFHF: $35,000 SSCC: $48,000

[1] 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).

[2] 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.

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.

During the summer of 2021, we had 5 wildfires which ignited in recently completed fuels reduction treatment areas (human caused) (fires: Placer, Solomon, Solomon Road, Deer Ridge, and Deer Stew 20). In these scenarios, as has been typical in previous years, the rate of spread and fire intensity was minimal in the treated area due to the lack of fuels available to burn. Treatments which focus on reducing fuels in all layers provide a safer place for firefighters to engage in effective suppression actions (as compared to untreated areas). Our harvest/burn 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, with virtually no risk of passive or active crown fire. These flame lengths are well within the threshold of direct attack by firefighters on the ground. The fuels treatments allowed firefighters to bring all these fires under control within a single operational period, with all fires being held to 1 acre in size or less; all were controlled without the need for aerial or other more costly resources.

The photo below shows the minimal fire behavior experienced when a wildfire started in a unit where fuels had been treated (black noticeable on the ground – some scorch, but no torching out and trees survived). The untreated fuels outside the unit were consistent with a Fuel Model 10 (Figure 4), where predicted surface flame lengths are above 4 feet (direct attack limit) and there is a greater potential for torching due to low canopy base heights. In addition, expected fire behavior in the untreated fuels would have likely included more rapid rates of spread and intensity. Thus, had these areas not been treated, it's possible more resources (engines, machinery, aircraft) would have been necessary through extended attack, potentially driving suppression costs into the tens or hundreds of thousands of dollars.

Figure 3. Solomon Road fire within the Twin Skin project area where timber harvest, slashing and piling and pile burning of surface fuels had previously occurred (completed in 2015).

Figure 4. Untreated fuels adjacent to Twin Skin unit 17 and the Solomon Road fire. The canopy is dense with very low ladder fuels to facilitate torching. Surface fuels consist of a moderate load of small down woody material which ignites easily and would be the main carrier of a surface fire.

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:

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

<u>If a wildfire interacted with a previously treated area within the CFLR boundary</u>:

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.**

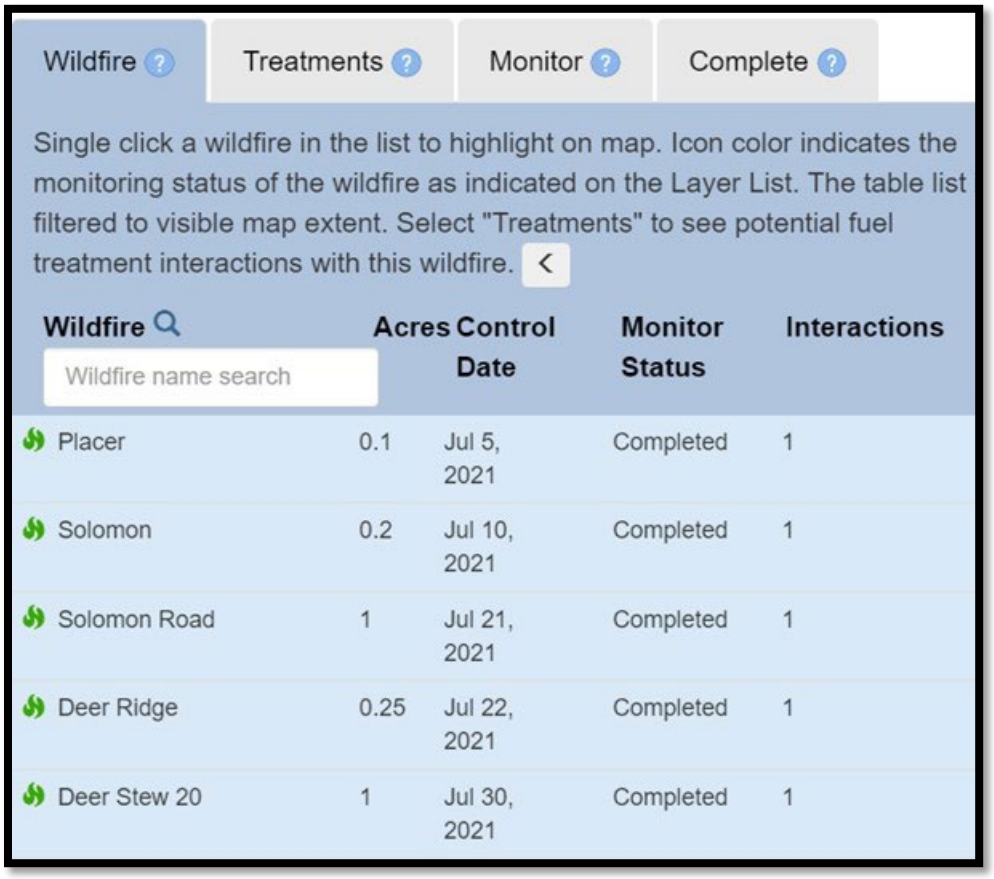

Figure 5. Screenshot of completed FTEM monitoring for 2021 wildfires interacting with previous treatment areas.

- *Please describe if/how partners or community members engaged in the planning or implementation of the relevant fuels treatment.*

All 5 wildfires as shown in Figure 5 above interacted with treatments accomplished to meet the integrated targets of the KVRI CFLRP project. The Kreist Creek and Deer Creek projects (Placer, Deer Ridge and Deer Stew 20 Fire interactions) were developed in collaboration with KVRI from project initiation through decision and implementation, while the Twin Skin project (Solomon and Solomon Road fires) have been implemented to meet goals and objectives outlined in the CFLRP proposal. Participants in the planning of these projects, and the relevant treatment units, included The Kootenai Tribe of Idaho, Boundary County Commissioners, environmental groups, the Idaho Dept. of Lands, USFWS, private industry, the City of Bonners Ferry, private landowners, and other members of the community and interest groups. Specific to the Kreist and Deer Creek projects, engagement by collaborative members included numerous meetings and field trips throughout the planning process.

- *Did treatments include coordinated efforts on other federal, tribal, state, private, etc. lands within or adjacent to the CFLR landscape?*

Yes, the Deer Creek, Kreist Creek, and Twin Skin projects were all prioritized by Boundary County FireSafe and the Boundary County Wildland Urban Interface Committee to seek and obtain HFR grant dollars to conduct fuels reduction on private land adjacent to the project boundaries. Treatments on adjacent private land occurred in the vicinity of Meadow Creek, Feist Creek, Eastport, Deer Creek, Perkins Lake, and near Moyie Springs, Idaho. Numerous private parcels were treated because of coordinated planning efforts with these projects.

- *What resource values were you and your partners concerned with protecting or enhancing? Did the treatments help to address these value concerns?*

In addition to reduced fire risk on public land, protection of private land, private timber values, infrastructure servicing adjacent homes, egress and ingress routes, water quality, and wildlife habitat – to name a few – were of concern. Considering that wildfire interaction with treatments resulted in minimal fire behavior and spread, we believe these treatments helped address the concerns - the outcome was the protection of all values.

- *Did the treatments do what you expected them to do? Did they have the intended effect on fire behavior or outcomes?*

Yes, please see narrative under the section titled "**How may the treatments that were implemented contribute to reducing fire costs?**"

- *What is your key takeaway from this event – what would you have done differently? What elements will you continue to apply in the future?*

Even under conditions associated with 'High' fire danger, focusing on WUI treatments that mitigate fuels in all layers – surface, ladder, and canopy fuels – generally results in reduced fire intensities near values due to access and the ability to safely and effectively direct attack wildfires, in many cases bringing them under control during initial attack.

<u>If a wildfire occurred within the CFLR landscape on an area planned for treatment but not yet treated</u>:
NONE occurred in 2021

- Please include:
  - *Acres impacted and severity of impact* - **NA**
  - *Brief description of the planned treatment for the area* - **NA**
  - *Summary of next steps – will the project implement treatments elsewhere? Will they complete an assessment?* - **NA**
  - *Description of collaborative involvement in determining next steps* **– NA**

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 (TREAT) inputs and assumptions available <u>here</u>.[3]

Some basic background information:

- All biological surveys, sale preparation and contract administration are done with force account crews.
- Prescribed burning (both activity fuel and natural fuels) is accomplished with force account crews.
- Planting and thinning is done primarily via contract, but the contractors are all from out of area.

Looking at your CFLRP project's TREAT Data Entry "Full Project Details" Tab, what percent of funding was used for contracts within the local impact area? 64%

Contract Funding Distributions ("Full Project Details" Tab):

[3] *For CFLRP projects under the CFLRP Common Monitoring Strategy this and the responses below address the core CFLRP common monitoring strategy questions, "*How have CFLRP activities supported local jobs and labor income?" and "How do sales, contracts, and agreements associated with the CFLRP affect local communities?

Description	Project Percent
Equipment intensive work	18%
Labor-intensive work	15%
Material-intensive work	63%
Technical services	3%
Professional services	1%
Contracted Monitoring	0%
TOTALS:	**100%**

Please provide a brief description of the local businesses that benefited from CFLRP related contracts and agreements, if known. Consider characteristics such as tribally-owned firms, veteran-owned firms, women-owned firms, minority-owned firms, and business size.[4]

FY 2021 Modelled Jobs Supported/Maintained (CFLN and matching funding):

FY 2021 Jobs Supported/Maintained	Jobs (Full and Part-Time) (Direct)	Jobs (Full and Part-Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	**60**	**79**	**3,121,214**	**3,784,234**
Forest and watershed restoration component	**13**	**22**	**363,100**	**644,415**
Mill processing component	**69**	**137**	**3,617,950**	**5,548,654**
Implementation and monitoring	**13**	**14**	**476,406**	**528,877**
Other Project Activities	**0**	**0**	**0**	**0**
TOTALS:				

4. **Briefly describe other community benefits that align with the CFLRP proposal and strategies socioeconomic goals**. **How has CFLR and related activities benefitted your community(ies) from a social and/or economic standpoint?** Please link to monitoring reports or other relevant information if available.

A tremendous amount of work was completed on the KVRI CFLRP landscape in FY20 by Forest Service summer employees, contractors, and volunteers. In addition to completing all the great restoration work on the forest, they also contributed significantly to the local economy through the purchase of groceries and supplies, eating at local restaurants, and staying in local motels. More detailed benefits are listed below:

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

[4] This information is publicly available through usaspending.gov, there are other firm characteristics that may be more relevant for your CFLRP project or important for tracking over time.

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 so Forest Service personnel can plan mitigations. Another recent example was a request to include additional snowmobile parking and a site for a winter warming hut in the NEPA for a recent restoration project. The NEPA will allow a local sportsman group to raise funds to construct the hut and the parking will reduce the current resource damage created by recreationists creating their own parking areas.

Contracting

Contracting for the restoration work associated with the CFLRP area is done in support of timber sales and 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 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. Planting and precommercial thinning work continue to be accomplished mostly by out-of-area contractors. These contractors are very skilled, and the competitive bidding process returns a good value to the government.

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 waterways unless they are regularly maintained, reconstructed, rerouted, and/or stabilized. This work is not possible without the assistance of volunteers and partners. In 2020, volunteers from across the country joined members of local user groups, conservation groups, and Forest Service employees to restore approximately 294 miles of trail as well as improving plant communities along lakeshores and dispersed camping areas.

5. Based on your project monitoring plan, **describe the multiparty monitoring process.** *Consider:*

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.

<u>Social Monitoring:</u>

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

<u>Economic Monitoring:</u>

- *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)

Ecological Monitoring: 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 ninth 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 resulting from 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 status of the trail system and road system within the project area. This monitoring and planning are 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 program allows the public to research the 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 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 are another valuable source of social and economic monitoring information relative to the impacts of work, or lack of work, within Boundary County.

6. FY 2021 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	793	
Acres of forest vegetation improved FOR-VEG-IMP	Acres	0	
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	224.6	
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	2	

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost ($) *(Contract Costs)*
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	0	
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	2.2	
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	3,438	
Acres of rangeland vegetation improved RG-VEG-IMP	Acres	0	
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	68.05	
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	57	
Miles of road decommissioned RD-DECOM	Miles	0	
Miles of passenger car system roads improved RD-PC-IMP	Miles	0	
Miles of high clearance system road improved RD-HC-IMP	Miles	0	
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.*	Miles	0	
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	1	
Miles of system trail maintained to standard TL-MAINT-STD	Miles	279.23	
Miles of system trail improved to standard TL-IMP-STD	Miles	15.05	
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles	NA	
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	1,422	
Volume of Timber Harvested TMBR-VOL-HVST*	CCF	26,376.14	
Volume of timber sold TMBR-VOL-SLD*	CCF	49,704.19	
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG*	Green tons	13,235.56	
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	1,119	
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	1,388	
Acres mitigated FP-FUELS-ALL-MIT-NFS	Acres	3578	
Please also include the acres of prescribed fire accomplished	Acres	1384	
(Optional) TMBR-BRSH-DSPSL	*Acres*	880.5	
(Optional) RD-HC-RCNSTR	*Acres*	5.02	

Units accomplished should match the accomplishments recorded in the Databases of Record. For CFLRP projects under the CFLRP Common Monitoring Strategy, items marked with a * help to address the core CFLRP common monitoring strategy question, "Did CFLRP increase economic utilization of restoration byproducts?"

7. **The Washington Office (Enterprise Data Warehouse) will use spatial data provided in the databases of record to estimate a treatment footprint for each CFLRP project's review and verification**. This information will be posted here 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**, note the total acres treated below.

Fiscal Year	**Footprint of Acres Treated** (without counting an acre of treatment on the land in more than one treatment category)
FY 2021	8,298.2 acres
Estimated Cumulative Footprint of Acres (CFLRP start year through 2021)	FY12 – 2,300 acres (from previous annual report) 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 FY20 – 9,310.7 acres FY21 – 8,298.2 acres Total Treatment Footprint through FY21 – 72,425.16 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?

8. **Describe any reasons that the FY 2021 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?

9. Planned FY 2022 Accomplishments (for CFLRP projects with **known** ongoing funding in FY22)[5]

Performance Measure Code	**Unit of measure**	**Planned Accomplishment for 2021** (National Forest System)	***Planned Accomplishment on non-NFS lands within the CFLRP landscape***[6]
Acres of forest vegetation established FOR-VEG-EST	Acres		
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre		

[5] Projects funded beginning in FY21, or extensions of 5 years or more, will be following the new Common Monitoring Strategy and will be asked to provide information on invasives, wildlife habitat, and reduction in fuels that go beyond acre tallies. Please work with your Regional CFLRP Coordinator as these are implemented.

[6] 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

Performance Measure Code	Unit of measure	Planned Accomplishment for 2021 (National Forest System)	*Planned Accomplishment on non-NFS lands within the CFLRP landscape*[6]
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles		
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres		
Miles of road decommissioned RD-DECOM	Miles		
Miles of passenger car system roads improved RD-PC-IMP	Miles		
Miles of high clearance system road improved RD-HC-IMP	Miles		
Volume of timber sold TMBR-VOL-SLD	CCF		
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons		
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre		
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres		

Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2021 is available.

10. **Planned accomplishment narrative and justification if planned FY 2022 accomplishments and/or funding differs from CFLRP project work plan** (for CFLRP projects with **known** ongoing funding in FY22):

11. **Please include an up to date list of the members of your collaborative if 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.[7]

Please see updated KVRI list below:

[7] For CFLRP projects under the CFLRP Common Monitoring Strategy, this table addresses the core CFLRP common monitoring strategy question, "Who is involved in the collaborative and if/how does that change over time?"

KVRI Contact List			
Name	**Representing/ Area of Interest**	**Phone**	**Email**
Adam Arthur	(Alt.) City of Bonners Ferry, KVRI Co-Chair	208.267.3105	adamea77@gmail.com
Bob Blanford	Business/Industry	208.290.4659	bob.blanford@gmail.com
Carl Petrick	Forest Supervisor, IPNF		carl.petrick@usda.gov
Brad Corkill	Idaho Fish & Game Commission	208.682.4602	bradcorkill@whitemanlumber.com
Chip Corsi	(Alt.)Idaho Fish & Game Commission	208.769.1414	charles.corsi@idfg.idaho.gov
Dan Dinning	Boundary County Commissioners, KVRI Co-Chair	208.267.7723 208.290.7758	dmding@frontier.com
Dave Bobbitt			panhandle.commissioner@idfg.idaho.gov
Dave Gray	(Alt.) Social/Cultural/Historical	208.267.2576	daddg@frontier.com
Dave Wattenbarger	Soil Conservation District/ Landowner	208.267.7468	daveandjeanw@yahoo.com
Dick Staples	Bonners Ferry Mayor		dstaples@bonnersferry.id.gov
Don Allenberg	(Alt.) Corporate Agriculture/Landowner	208.267.8569	don.allenberg@anheuser-busch.com
Ed Atkins	Corporate Agriculture/Landowner	208.267.8569	ed.atkins@anheuser-busch.com
Gary Aitken Jr.	Kootenai Tribe of Idaho (KTOI), KVRI Co-Chair	208.267.3519	garyjr@kootenai.org
Jim Cadnum	Landowner/Industry	208.267.5776	jkcornman@gmail.com
Kennon McClintock	(Alt.) Conservationist/Environmentalist	208.267.8999 208.255.9158	kmcclintock@tnc.org
Kevin Knauth	(Alt.) U.S. Forest Service- IPNF	208.267.6701	kevin.knauth@usda.gov
Kim Pierson	Deputy Forest Supervisor, IPNF		kimberly.pierson@usda.gov
Rhonda Vogl	KTOI/KVRI Facilitator	208.267.3519	rvogl@kootenai.org
Robyn Miller	Conservationist/Environmentalist	208.691.2468	robyn_miller@tnc.org
Sandy Ashworth	Social/Cultural/Historical	208.267.3803	shoeboxacres@hotmail.com
Tim Dillin	(Alt.)Soil Conservation District/ Landowner	208.267.7192	tdillin@hotmail.com

Tim Dougherty	(Alt.)Business/Industry	208.290.6562	tdougherty@idfg.com
Wally Cossairt	Boundary County Commissioner		wallycoss@gmail.com

Signatures:

Recommended by (Project Coordinator(s)): /S/Kevin S Knauth

Approved by (Forest Supervisor(s)): _____

Draft reviewed by (collaborative chair or representative): _____