CFLR Project (Name/Number): Tapash CFLRP (08)

National Forest(s): Okanogan-Wenatchee 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	$356,176

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
NFHF	229,893

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 (please include a new row for each BLI)	Total Funds Expended in Fiscal Year 2019
CMRD	$305,000
CMXN	$175,000
NFVW	$4,016

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
NFXN	$54,615

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
Yakama Nation Little Naches River large wood placement (BPA/WA DOE/YBIP)	$394,527

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 revised non-monetary credit limit for contracts awarded in FY19	$

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 in-kind 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	Forest Service or Partner Funds?	Source of funds
I-90 Wildlife Bridges: seed collection, planting, invasive plant treatment	TAPASH landscape-Upper Yakima headwaters	$101,200	Partner	WSDOT
Yakima Basin Integrated Plan: invasive plant treatment, plant propagation and planting	FS Lands-Wishpoosh Campground, Lake Cle Elum, Box Canyon, Speelyi Beach	$28,060	USFS/partner	Department of Ecology, BOR, Regional funds SPFH program, Conservation Northwest, Mountains to Sound Greenway, Volunteers
Swauk Creek meadow restoration: plant restoration, invasive plant treatment	FS lands- Swauk Creek	$45,000	Partner	WSDOT, Mid-Columbia Fisheries
Invasive plant treatment	William O. Douglas & Goat Rocks Wilderness; Miriam & Left Hand Fires; Upper Yakima, Teanaway, Manastash /Taneum, Cle Elum, Swauk, Rattlesnake watersheds	$62,110	USFS	KV, Wilderness Stewardship, BAER, NFVW
Plant propagation and seeding	Wildcat bridge	$1,000	Partner	WSDOT
USGS led barred owl removal study	Cle Elum Ranger District	$115,000	Partner/USFS	USGS/USFS
Peoh Point Fuels Reduction	123 acres in South Cle Elum	$131,500	Partner	DNR/private
Cle Elum Ridge Fuels Reduction	90 acres on Cle Elum Ridge	$128,000	Partner	DNR/private
Invasive Species Management	Treatments on Cle Elum & South Cle Elum ridges	$20,000	Partner	private
Ecological monitoring	Across Tapash	$85,000	Partner	private
Forest road inventory	Across Tapash	$35,000	Partner	private
Road improvements within CCF ownership	Taneum/Cabin/Cle Elum watersheds	$36,000	Partner	private
Swauk Creek floodplain reconnection	Swauk Creek	$130,000	Partners	USFWS/WNTI/SRFB/NFF

Description of item	Where activity/item is located or impacted area	Estimated total amount	Forest Service or Partner Funds?	Source of funds
South Cle Elum Ridge planting	500 acres replanting	$87,500	Partner	Arbor Day Foundation/private
Road improvements	North Fork Taneum	$5,500	Partner	TNC
Unit layout for PCT	285 acres Manastash /Taneum	$15,000	Partner	Joint Chiefs/NRCS
Tree planting post-Jolly Mountain fire	400 acres Cle Elum Ridge	$67,000	Partner	Arbor Day Foundation/private
Coordination capacity	Ahtanum Tieton watershed	$7,500	Partner	WA DNR
Professional facilitation	Little Naches watershed	$7,500	Partner	WA DNR
Communications and outreach capacity	Kittitas and Yakima Counties	$10,000	Partner	WA DNR
Online Map and Portal development for Small Forest Landowner Forest Management	Kittitas County	$28,750	Partner	WA DNR
Map and GIS data for across-ownership fuel breaks	Kittitas County	$2,875	Partner	WA DNR
Total		$1,149,495		

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

The Tapash landscape continues to benefit from cross-boundary opportunities created by a shared attachment to this eastside stretch of the Cascade Mountains in central Washington. Forest Service partners have again outspent the CFLR dollars committed for this fiscal year. Acres of invasive plants were treated and native plants sown in their place. Wildlife passage over an eight-lane interstate was re-opened with several safe corridors constructed for fish and wildlife to get from north of I-90 to south of I-90. Barred owls were “mitigated” in spotted owl habitat to relieve increasing competitive pressure from this aggressive interloper from the east. Pockets of overstocked forest were thinned, or prepped for thinning, to reduce fuels and open growing space for more mature trees. Road improvements helped to maintain forest access while reducing transportation-related impacts to area streams. Trees were planted in burned over areas where regeneration was deficient. An ever-widening circle of public interest was engaged through creative communication, outreach, and web-based tools. Additionally, targeted monitoring helped analyze the efficacy of our ongoing treatments.

2019 saw one of the greatest mechanical advantages for a leveraged use of funds within the Tapash landscape, thus far. The Forest Service, in partnership with The Nature Conservancy, obtained Land and Water Conservation Fund dollars to acquire 4,815 acres of former cutover land from the Plum Creek Timber Co. for $6,609,000. The acquisition consisted of many privately owned “checkerboard” parcels surrounded by the Okanogan-Wenatchee National Forest (OWNF). Permanent conservation in a national forest means these parcels will never again be harvested at an industrial scale. They will again join seamlessly with neighboring stands as they progress through unfettered stages of succession and disturbance. Tapash was referenced in the grant application.

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***.

The Tapash collaborative forest landscape includes dry and mesic forest types across various ownerships loosely defined by the Naches and Cle Elum Ranger Districts of the OWNF. Restoration activities have been planned and implemented in the National Forest and on adjacent state-managed, tribal-managed, and privately managed lands since the grant was approved in 2010. Using a mix of commercial timber harvest, pre-commercial thinning, prescribed fire, and management of wildfire ignitions for beneficial outcomes, the collaborative has touched at-risk stands in every subwatershed of the proposal area. Incremental improvements addressing vegetation departure, fire flow, wildlife habitat, and aquatic resources have moved the landscape onto a trajectory towards its historic range of variability. A fire-adapted landscape where natural and human-caused ignitions can be absorbed by a forest structurally equipped to allow fire to burn at low to medium intensities, remain primarily on the ground, and consume manageable levels of fuels in the understory.

The activities implemented, and those planned beyond the CFLRP grant window, unwaveringly adhere to the four goals of the 10-year Comprehensive Strategy Implementation Plan by improving fire prevention and the ability to suppress fire when needed, reducing hazardous fuels, restoring fire-adapted ecosystems, and promoting community assistance. The Tapash Collaborative follows the Strategy's three guiding principles, as well, by prioritizing the protection of forest communities and concentrating on high-priority watersheds; collaborating with all levels of government and other public and private organizations; and by ensuring accountability through monitoring and adherence to performance measures.

Implementation in 2019 has treated thousands of acres at risk to high intensity, stand replacing fires that could destroy critical habitat for endangered and threatened species, threaten private and public property, close public lands for recreation, choke streams with post-fire runoff, and damage soils so severely as to prevent regeneration of the next vegetated cohort. CFLR funds continue to support projects that restore floodplains and stream complexity by adding wood back into streams, replacing undersized culverts, restoring natural hydrology, treating and preventing invasive species, and providing erosion control.

FY2019 Overview

FY19 Activity Description (Agency performance measures)	**Acres**
Number of acres treated by prescribed fire	1,702 (Naches) 415 (Cle Elum)
Number of acres treated by mechanical thinning	20
Number of acres of natural ignitions that are allowed to burn under strategies that result in desired conditions	1,123 (Left Hand Fire)
Number of acres treated to restore fire-adapted ecosystems which are maintained in desired condition	3,240
Number of acres mitigated to reduce fire risk	3,260

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.

We completed prescribed burns and burn plans covering a large array of landscape types. These projects have expanded the footprint of treated lands designed to buffer non-federal lands and WUI areas. The average fuels acres treated per

year have been approximately 3,000 acres on Federal land in the Tapash landscape. Limitations to increase the acres treated include smoke management, limited burn windows, and severity of fire season that limits resource availability.

The Cle Elum and Naches Districts are finishing two landscape-scale restoration NEPA documents in early 2020 (Little Crow and Taneum). Both projects required Northwest Forest Plan amendments but are expected to implement restoration beginning in early calendar year 2020.

There will, no doubt, be more bumps that pop up in creating a more resilient landscape, but the CFLRP grant has extended the abilities of Tapash Sustainable Forest Collaborative members to communicate priorities and implement projects among differing ownerships. The objective of our projects is to move the landscape to a condition where fire produces positive effects, naturally, using prescribed fire, non-commercial thinning, commercial thinning, and other restoration activities.

> **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.

Areas for treatment and project planning have been prioritized using the Okanogan-Wenatchee Restoration Strategy and additional information regarding risk to high quality habitat and aquatic systems. Consistent with previous years, prescribed burn areas were prioritized based on funds collected to reduce activity created slash from timber sale purchasers. Burn locations are chosen based on length of time since mechanical treatments and proximity to public exposure and risk. Treatments are always contingent on weather.

> **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)

Treatments on the Cle Elum and Naches Districts were in high and very high hazard areas as identified by Forest Service modeling and reinforced in the Washington State Wildland Fire Protection 10 year Strategic Plan.

> Were the treatments in **proximity to a highly valued resource** like a community, a WUI area, communications site, campground, etc.?

Yes. Treatments on Federal land in the Tapash landscape are often in close proximity to the WUI and other developed areas. One project was designed as a fuel break around a communication site, and the Little Crow project specifically reduces fuels and hazard trees from near recreation sites and a recreation residence tract.

> **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.

Consistent with previous years, we value the restoration outcomes, relationships with stakeholders, relevance to our communities, and lessons learned through the collaborative process as the highest metrics of our accomplishments. Growing the pace and scale of treatments has been difficult (please see question five from the Fire Regime ecological indicator). We have also presented to the Tapash collaborative the need to think whether we approach projects with a broad scope or a large scale. We have learned that while large landscape projects may an important part of the planning portfolio, we also need to think about how to use other authorities and tools to take on smaller projects, in urgent areas, and potentially use new CE categories and Good Neighbor Authority partnerships with the DNR. We need to add in flexibility into our project prioritization so we can respond to high-need areas and still stay on course and schedule with our large landscape planning efforts. Finally, we have struggled to finish projects before we move on to

the next. Increasing the pace and scale only works if we do the right work and complete that work before taking on or promising more work, especially with partners.

> **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.

Expenditures

Category	**$**
FY2019 Wildfire Preparedness[1]	$1,100,000
FY2019 Wildfire Suppression[2]	$15,050,000
The cost of managing fires for resource benefit if appropriate (i.e. full suppression versus managing)	0[3]
FY2019 Hazardous Fuels Treatment Costs (CFLN)	0
FY2019 Hazardous Fuels Treatment Costs (other BLIs)	$360,000

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.

The Rock Creek, Left Hand, Miriam and Jolly Mountain fires all were in proximity to fuel treatments created by the Forest Service and our Tapash partners that were used during fire suppression as strategic locations to stop or hold the fires, to reduce exposure for fire fighters, they increased the probability of success of suppression efforts, and allowed for more decision space and slowed down the emergency of the situations. These treatment acres saved time and money during the suppression efforts because the work had already been accomplished and did not need to occur in an emergency.

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 additional assessments to list.

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.*

[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.

[3] Few ignitions occurred in Summer 2019, only one fire (Lefthand Fire) had potential for managed wildfire, but was threatening state and private lands so was placed in full suppression.

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.**

- *Please describe if/how partners or community members engaged in the planning or implementation of the relevant fuels treatment.*
- *Did treatments include coordinated efforts on other federal, tribal, state, private, etc. lands within or adjacent to the CFLR landscape?*
- *What resource values were you and your partners concerned with protecting or enhancing? Did the treatments help to address these value concerns?*
- *Did the treatments do what you expected them to do? Did they have the intended effect on fire behavior or outcomes? Please include a brief description.*
- *What is your key takeaway from this event – what would you have done differently? What elements will you continue to apply in the future?*
- *What didn't work as expected, and why? What was learned?*
- *Please include the costs of the treatments listed in the fuels treatment effectiveness report: how much CFLR/CFLN was spent? How much in other BLI's were spent? If cost estimates are not available, please note and briefly explain.*

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

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

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

The Cle Elum district had a total of 2.5 acres burned from unplanned ignitions that were contained at initial attack for a cost of $50,000. The Naches district fought the Left Hand fire on its west and south flank to protect homes and a highway, managed the fire to the north and east into areas planned for prescribed fire. 3,400 acres at $15,000,000.

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.

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	0	0	0	0
Forest and watershed restoration component	0	0	0	0
Mill processing component	0	0	0	0
Implementation and monitoring	1	1.5	36,305	45,534
Other Project Activities	0	0	0	0
TOTALS:	**1**	**1**	36,305	45,534

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	0	0	0	0
Forest and watershed restoration component	0	1	13,477	18,656
Mill processing component	0	0	0	0
Implementation and monitoring	1	2	39,751	49,855
Other Project Activities	0	0	0	0
TOTALS:	2	2	53,277	68,512

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
Contributions to the local recreation / tourism economy	Human Ecology Mapping directly communicated where recreation users liked to recreate in the Taneum project area. This map-based product overlaid survey info on other resource layers to look at opportunities and conflicts between/among user groups. We also gained a better understanding of traditional and cultural uses in the Taneum with participation from members of the Yakama Nation. Survey helped to develop a more sustainable trail strategy, understand economic impacts, and discover how far people travel to use Taneum for OHV (a long ways).	
Community support for relevant initiatives	Tapash members helped to engage private land owners and other organizations to educate and organize around fire-wise practices with the Kittitas Fire Adapted Communities Coalition (KFACC). All landscape scale restoration projects in the Tapash collaborative supported stakeholder engagement and a crossed ownership boundaries.	
Relationship building / collaborative work	The Tapash Sustainable Forest Collaborative original members (Yakama Nation, TNC, FS, WDFW, WDNR) have used the connections made to build on other area landscape scale endeavors, like the fire-wise KFACC. The East Cascades Recreation Partnership has brought Collaborative members together to reformulate how recreation infrastructure decisions are made and funded. The Checkerboard Partnership is advocating for a community Forest. Community members and long-time interest groups are working with Collaborative members through the Little Naches Working Group to design and implement the Little Crow project, determine the collaborative process, proposed actions, and planning for the Little Naches Restoration Project.	
Preserving cultural heritage of sites / resources	Yakama Nation is a foundational member of the Tapash collaborative, along with the Forest Service. This mutual participation has helped build the relationship between FS and the Yakama Nation from the overall integration of member interests. Yakama Nation personnel have helped with cultural surveys in the proposal area and have fostered greater awareness and consideration of cultural resources during project development. A YN archaeologist is stationed in Naches RD and works very closely with the district staffs to preserve cultural resources around the project areas.	

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.

For more than 10 years, the Forest Service has been collaborating on monitoring landscape level ecological connectivity with Central Washington University, Montana State University, Washington Department of Transportation, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife, Conservation Northwest, I-90 Wildlife Bridges Coalition, I-90 Wildlife Watch and the Cascades Carnivore Project. Monitoring of species include macroinvertebrates, fish, amphibians, small and medium sized mammals, carnivores and ungulates. The techniques include remote camera monitoring, trapping, collecting DNA samples, habitat analysis, and species use of restored habitats. We are also collaborating on several Citizen Science projects in which the public documents animal sightings, conducts winter snow tracking, and monitors remote cameras. The focal species include pika, flying squirrel, western toad, bull trout, cutthroat trout, wolverine, marten, black bear, mountain lion, mountain goat, elk, deer, Cascade Red fox, barred owl, and a diversity of shrew species. The results are being used to identify improved wetland, stream channel, and floodplain restoration techniques (e.g. stream channel design and installation of habitat elements, such as downed logs, rock piles, in-stream wood, and native plants) in restored habitat adjacent to and within I-90 ecological connectivity structures.

Invasive plant treatment monitoring is completed by the herbicide sprayer through revisits to herbicide treatment areas at least two weeks post treatment through a visual inspection. Post planting restoration projects have been monitored for plant survivorship. Using native plant materials grown and planted by native plant and restoration specialists has led to very high survivorship in all planting projects. Monitoring in these restoration sites includes plant survivorship as well as invasive plant encroachment.

We are waiting on Swauk Pine restoration project implementation (timber sale to sell) to complete the post-action data collection component on the northern spotted owl prey base / dry forest restoration study, in partnership with the PNW Research Station.

- *What parties (who) are involved in monitoring, and how?*
  FS hires temporary employees to conduct monitoring and partners with several academic and citizen groups.

- *What is being monitored? Please briefly share key broad monitoring results and how results received to date are informing subsequent management activities (e.g. adaptive management), if at all. What are the major positive and negative ecological, social and economic shifts observed through monitoring? Any modifications of subsequent treatment prescriptions and methods in response to these shifts?*

The Nelli and Dry Ridge projects have had post-treatment monitoring on 1,170 acres where mechanical treatments created habitat for white-headed woodpecker (WHWO). Treatments that help develop WHWO habitat reduce canopy cover to 20% or below. Underburning on these treatment areas will result in additional improvements to WHWO habitat. Post-treatment monitoring has indicated a favorable response from WHWO in the veg treatment area. The District is planning additional veg treatment to encourage the development of WHWO habitat in the Little Crow restoration project. Baseline monitoring (pre-treatment) was conducted for WHWO habitat in the Little Crow project area (2,800 ac) which documented use by a few WHWO, indicating that existing dry forest stands are somewhat favorable for WHWO, but limited in extent.

Wide ranging carnivores were also monitored for Little Naches (95,321 acres). Baseline monitoring documented existing use (traveling) by Cascade Red fox and wolverine within the higher elevations of this watershed.

What are the current weaknesses or shortcomings of the monitoring process? How might the CFLRP monitoring process be improved? (Please limit answer to one page.).

CFLR funds have been a great benefit for monitoring within the Tapash landscape. After-treatment monitoring for wide ranging carnivores will, more than likely, not continue since the CFLR grant is ending. Therefore, there will be no evaluation of the effects to carnivore species resulting from upcoming veg treatments. The OWNF wildlife team determined that continued monitoring of wide-ranging carnivores in Little Naches was less of a priority for wildlife program funds. This decision was based on the difficulty of measuring the effects of vegetation treatments on wide ranging carnivores, as they do not occur frequently in an area and there are no vegetation treatments planned in high elevations where there is greater probability of encountering these species.

- *Please provide a link to your most up-to-date multi-party monitoring plan and any available monitoring results from FY19.*

We have several monitoring reports from 2019 that are posted in the CFLRP Sharepoint (here).

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	333	
Acres of forest vegetation improved FOR-VEG-IMP	Acres		
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	1,786	
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	39,226 (Barred owl removal)[4]	$115,000
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres		
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres		
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	2.8	
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	23,549	
Acres of rangeland vegetation improved RG-VEG-IMP	Acres	13,937	
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles		
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles		
Miles of road decommissioned RD-DECOM	Miles	.47[5]	
Miles of passenger car system roads improved RD-PC-IMP	Miles		
Miles of high clearance system road improved RD-HC-IMP	Miles		

[4] Experimental treatment for Endangered Species Act protected species (N. Spotted Owl). This performance measure was not originally proposed but is a meaningful accomplishment to record.

[5] Data entry error resulted in failure to capture as CFLRP accomplishment. This was an anticipated accomplishment target for CFLRP

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost ($) *(Contract Costs)*
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		
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number		
Miles of system trail maintained to standard TL-MAINT-STD	Miles		
Miles of system trail improved to standard TL-IMP-STD	Miles		
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles		
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	.5	
Volume of Timber Harvested TMBR-VOL-HVST	CCF		
Volume of timber sold TMBR-VOL-SLD	CCF	486	
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	289	
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	180	
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	2,780	
Acres mitigated FP-FUELS-ALL-MIT-NFS	Acres		
Please also include the acres of prescribed fire accomplished	Acres		
Number of priority acres treated annually for invasive species on Federal lands SP-INVSPE-FED-AC	Acres		
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres	5,104 (Tussock moth TM biocontrol)[6]	$393,000

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

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.)

The Snoqualmie Pass area, within the Tapash landscape, is recognized as a critical link for the connectivity of wildlife populations in the Pacific Northwest. This area represents the narrowest width, west to east, of public land between Northern California and Southern British Columbia and provides important linkage between critical wildlife refugia, such as undeveloped National Forest wilderness areas, National Parks, and tribal lands.

The combination of a "checkerboard" private/National Forest ownership pattern along with increased traffic volumes on I-90 resulted in a high risk of demographic isolation of wildlife populations on the Tapash landscape. To reduce this risk, public and private efforts have resulted in the addition of 95,000 acres to the National Forest System and 80,000+ acres

[6] Unexpected treatment for an Endangered Species Act protected species (N. Spotted Owl). This performance measure was not originally proposed but is a meaningful accomplishment to record.

in conservation (i.e. State on private conservation lands). In addition, Washington Department of Transportation is modifying Interstate 90 to restore the connectivity of ecosystems, fish and wildlife habitats and species, hydrologic features, and native plant communities between the North and South Cascades.

The I-90 SPE project has been recognized for innovative collaboration on environmental planning and design, receiving numerous state and federal awards. The project also receives broad public support as evidenced by a recently released, award winning documentary, Cascades Crossroads, commissioned by the I-90 Wildlife Bridges Coalition. In the film, the project was described as,

> "… a monumental project combining conservation, collaboration, and innovation which led to the construction of North America's largest wildlife crossings project in conjunction with major infrastructure improvements for motorists. The I-90 Snoqualmie Pass East Project, and the wildlife crossings and roadway improvements within it, is a win-win for people and animals that offers a new model for major infrastructure projects bisecting wild places." (https://www.youtube.com/watch?v=BGFIoLkEKP4)

In total 7.5 miles of I-90 has been restored to provide ecological connectivity since 2015. This includes 6 large wildlife/ecological connectivity undercrossings (i.e. bridges-- 120-900' wide, with 18-30' height with habitats designed to mimic adjacent habitat), the first wildlife overcrossing in WA state, Seven fish passage structures which include restoration of the stream channel and floodplain (6 with significant fish passage barriers removed), numerous small/medium sized wildlife connectivity structures and hydrologic connectivity structures, restoration of habitat adjacent to crossing structures (20+ acres), and the land donation of 320 acres of habitat within a connectivity corridor.

In 2019, 5.5 miles were completed which included the Phase 1C Contract ($237 million) and the Phase 2A Contract ($110 million). The initial 2 miles were completed in 2015. The remaining 7.5 miles are currently being designed.

For FY19 we completed consultation and signed the Decision Notice for the Swauk Pine Restoration Project, requiring the completion of a timber sale review and associated updates to the Endangered Species Act 'baseline'. Completed consultation and signed the Decision Memorandum to begin implementing the Table Mountain Danger Tree Firewood project. Completed emergency consultation on the 2018 Iron East fire. Completed consultation and implemented the Douglas-fir Tussock Moth Abatement Project. Completed consultation and all work for the Box Canyon Bull Trout Large Wood project. Completed consultation and started implementing some road actions on the Walter Springs Restoration project. We are also very close to completing consultation on the Taneum Restoration project, the Swauk Mining District Plan of Operations project and the Routine Maintenance programmatic; all with significant specialist involvement in 2019 to continue landscape restoration beyond the CFLRP grant window.

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 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**, 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	19,609

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 2012 through 2019)	FY10 – FY18 = 43,707

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?

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).

The Tapash landscape restoration strategy has continued as a science-based integration of the needs from vegetation departure, uncharacteristic high-severity fire hazard, at-risk wildlife habitat, and degraded aquatic resources. Planning and implementation of projects at all scales are focused on these four landscape objectives, while also maintaining the recreation experience and access that Forest visitors have come to enjoy and expect. The four objectives are ever at odds with the two expectations and the friction among them makes for slow progress; or punctuated progress, as landscape scale projects seem to plod through analysis, consultation, and objection until the day a Decision is signed, opening thousands of acres to planned restoration treatments…if the timber sales sell and other funding, often through partners, can be secured.

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

Performance Measure Code	Unit of measure	Planned Accomplishment for 2020	*Planned Accomplishment on non-NFS lands within the CFLRP landscape*[7]
Acres of forest vegetation established FOR-VEG-EST	Acres		
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre		
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		

[7] 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	*Planned Accomplishment on non-NFS lands within the CFLRP landscape*[7]
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 2020 is available.

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

12. **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.

The original signatories to the Tapash Sustainable Forest Collaborative are represented by James Schroeder from The Nature Conservancy, Kristin Bail from the Okanogan-Wenatchee National Forest, Ross Huffman from the WA Dept of Fish and Wildlife, Larry Leach from the WA Dept of Natural Resources, and Phil Rigdon from the Yakama Nation.

In 2019, the Collaborative was joined by members from Sierra Pacific Industries, Central Washington Sentinels, Mid-Columbia Fisheries Enhancement Group, Methow Valley Citizens Council, Americorps – TNC, Kittitas Fire-Adapted Communities Coalition, Washington Farm Forestry Association, and the Yakima County Commission.

Several issue-oriented groups have emerged from the Collaborative's collective membership over the years. The Little Naches Working Group continued its work focused on the Little Naches watershed with three stakeholder workshops where expectations were shared, a work plan was developed, a decision process was established, and trust and open communication were reinforced. New to the landscape are the Checkerboard Partnership, a Central Cascades working group tasked with developing a proposal and plan to create a Kittitas County community forest out of lands purchased for conservation by The Nature Conservancy; the Kittitas Fire Adapted Communities Coalition (KFACC), a coordinated movement to increase community resilience to wildfire through education, planning, and technical assistance to private landowners; and the East Cascades Recreation Partnership, a group working to craft and implement a sustainable recreation strategy for Kittitas County through a broad-based collaboration of land management agencies, partner organizations, local communities, and recreational users.

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.

- https://www.dailyrecordnews.com/news/us-forest-service-plans-to-work-on-issues-related-to/article_1124108c-e54a-5575-a5d1-bc3d8b952984.html
- https://www.dailyrecordnews.com/news/environmental-groups-work-to-restore-river-habitat-in-the-teanaway/article_8b2ad1a8-3789-59bf-a66e-92d1de024e0a.html
- https://www.dailyrecordnews.com/news/multiple-agencies-plan-wood-replenishment-project-in-north-fork-teanaway/article_ddedd55f-20fb-5636-ab59-9122d063f261.html
- https://www.dailyrecordnews.com/news/second-phase-of-restoration-project-on-north-fork-manastash-completed/article_ba6eb0da-0bcf-5722-90b2-1cf1cd0e2273.html
- https://www.dailyrecordnews.com/news/biologists-work-to-restore-bull-trout-in-kachess-river/article_a2d2980d-324c-531a-8660-f32aeb62d9b1.html
- https://www.dailyrecordnews.com/news/local-middle-school-students-take-part-in-yakima-river-restoration/article_95999ffa-de47-545c-94fb-9f507bfb2543.html
- https://www.yakimaherald.com/news/local/prescribed-fire-planning-continues-during-wildfire-season/article_eb3bd70f-4b47-5445-af5f-5325bfbb14d4.html
- https://www.yakimaherald.com/news/local/improvements-help-cowiche-creek-and-fish-too/article_48915947-e179-546b-a7a0-b0da343e58be.html
- https://www.fs.usda.gov/detail/okawen/news-events/?cid=FSEPRD609627
- https://www.fs.usda.gov/detail/okawen/news-events/?cid=FSEPRD620320
- https://www.fs.usda.gov/detail/okawen/news-events/?cid=FSEPRD621342
- https://www.fs.usda.gov/detail/okawen/news-events/?cid=FSEPRD629400
- https://www.fs.usda.gov/detail/okawen/news-events/?cid=FSEPRD635953
- https://www.fs.usda.gov/detail/okawen/news-events/?cid=FSEPRD641241
- https://www.fs.usda.gov/detail/okawen/news-events/?cid=FSEPRD645788
- https://www.fs.usda.gov/detail/okawen/news-events/?cid=FSEPRD676641

Hessburg, Paul F., Carol L. Miller, Sean A. Parks, Nicholas A. Povak, Alan H. Taylor, Philip E. Higuera, Susan J. Prichard, et al. 2019. "Climate, Environment, and Disturbance History Govern Resilience of Western North American Forests." *Frontiers in Ecology and Evolution* 7 (July): 239. https://doi.org/10.3389/fevo.2019.00239.

Long, Linda L., and Jared D. Wolfe. 2019. "Review of the Effects of Barred Owls on Spotted Owls." *The Journal of Wildlife Management*, July, 15. https://doi.org/10.1002/jwmg.21715.

Spies, Thomas A, Jonathan W Long, Susan Charnley, Paul F Hessburg, Bruce G Marcot, Gordon H Reeves, Damon B Lesmeister, et al. 2019. "Twenty-five Years of the Northwest Forest Plan: What Have We Learned?" *Frontiers in Ecology and the Environment*, August, fee.2101. https://doi.org/10.1002/fee.2101.

Signatures:

Recommended by (Project Coordinator(s)): Acting

Approved by (Forest Supervisor(s)):

Draft reviewed by (collaborative chair or representative): _____