CFLRP Project Name (CFLR#): Northeast Washington Forest Vision 2020 (21)

National Forest(s): Colville National Forest

1. Executive Summary

The Northeast Washington Forest Vision 2020 project continues to evolve. Partnerships with the State, recreation organizations, and the Colville Confederated Tribes (CCT) continue to strengthen and provide successful results on multiple fronts. Our Good Neighbor Authority projects are yielding results in acres treated for fuels. A strong recreation related partnership program continues to be built, with one of the main focuses being on reducing the impacts of recreation sites and trails on water quality as well as other resources. CCT have increased their involvement on project planning and monitoring, and we aim to enjoin in a MOU in the future to conduct cross boundary, prescribed fire.

Although we had a quiet wildfire year in the CFLRP area with no fires extending beyond initial suppression nor topping more than an acre, we have continued to capitalize on one of our core strengths, which is leveraging multiple authorities to increase our scale of work on the ground. For example, of the 6,681 acres of hazardous fuels treatment completed in our CFLRP:

- 3,582 of those acres were in Stewardship project areas, and
- 3,582 of the completed acres were completed by WA DNR in GNA project areas.

This was also the year of trail improvement. Overall, we have made great strides in our CFLRP, and are looking forward to restoring this beautiful land we work with.

2. Funding

CFLRP and Forest Service Match Expenditures

Fund Source: CFLN and/or CFIX Funds Expended	Total Funds Expended in Fiscal Year 2023
CFIX22	$1,785.89
CFIX23	$2,033,111.98
CFLN2115	$2799.93
CFLN2120	$-2837
CFLN2121	$-41150.18
TOTAL	$1,993,710.62

This amount should match the amount of CFLN/CFIX 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 2023
CFNS2122	$0
CFNS2123	$0
TOTAL	$0

These fund sources did not match the official totals in the FMMI CFLRP expenditure report for Salary and Expenses. The official FMMI report total was $0. Staff time spent on CFLRP proposal implementation and monitoring may be counted as CFLRP match – see Program Funding Guidance.

Fund Source: Forest Service Discretionary Matching Funds	Total Funds Expended in Fiscal Year 2023
NISX CFHF2123 TOTAL	$1,707,275.75 $300,000.00 $2,007,275.75

Partner Match Contributions[1]

Fund Source: Partner Match	In-Kind Contribution or Funding Provided?	Total Estimated Funds/Value for FY23	Description of CFLRP implementation or monitoring activity	Where activity/item is located or impacted area
Evergreen Mountain Bike Alliance	☒ In-kind contribution ☐ Funding	$2,067.00	Tread Repair, Turnpike Erosion and Drainage Fixes, and Clearing Clogged Culverts on the Stickpin Trail.	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
Pierre Lake Campground Volunteer Host	☒ In-kind contribution ☐ Funding	$13,515.00	Pierre Lake Education, Information, resource damage repair, and Enforcement.	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
Pacific Northwest Trail Association Volunteers	☒ In-kind contribution ☐ Funding	$7,838.70	Swan Butte Cutoff and Swan Loop Trail, Stickpin, and Taylor Ridge trail work.	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
Swan Lake Campground Volunteer Host	☒ In-kind contribution ☐ Funding	$17,808.00	Swan Lake Education, Information, resource damage repair, and Enforcement.	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
Northwest Youth Corps	☒ In-kind contribution ☐ Funding	$9,755.00	Turnpike construction on high use riparian trails.	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:

[1] Addresses Core Monitoring Question #13

Fund Source: Partner Match	In-Kind Contribution or Funding Provided?	Total Estimated Funds/Value for FY23	Description of CFLRP implementation or monitoring activity	Where activity/item is located or impacted area
Pacific Northwest Trail Association	☒ In-kind contribution ☐ Funding	$82,369.95	Logout, brushing to standard, tread reconstruction, and drainage maintenance/construction.	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
Washington Trails Association	☒ In-kind contribution ☐ Funding	$381.60	Trail work on Profanity Peak and Kettle Crest trails.	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
BLM	☒ In-kind contribution ☐ Funding	$193,975	Hand thinning/pruning & Hand piling of fuels = 155 acres at $177,475 Hand pile burning of fuels = 132 acres at $16,500	☐ National Forest System Lands ☒ Other lands within CFLRP landscape:
Private Lands	☒ In-kind contribution ☐ Funding	$231,290	Hand thinning/pruning & Hand piling of fuels = 202 acres at $231,290	☐ National Forest System Lands ☒ Other lands within CFLRP landscape:
DNR State Trust Lands	☒ In-kind contribution ☐ Funding	$207,245	Hand thinning/pruning & Hand piling of fuels = 146 acres at $167,170 Commercial Thin = 35 acres at $40,075 Invasive Weed Spraying = 994 acres at $99,400	☐ National Forest System Lands ☒ Other lands within CFLRP landscape:

Total In-Kind Contributions: $766,245.30

Total Funding: $0

Total partner in-kind contributions for implementation and monitoring of a CFLR project across all lands within the CFLRP landscape.

Goods for Services Match

Service work accomplishment through goods-for services funding within a stewardship contract (for contracts awarded in FY23)	Totals
Total revised non-monetary credit limit for contracts awarded in FY23	$272,183
Revenue generated through Good Neighbor Agreements	Totals
	$714,108

"Revised non-monetary credit limit" should be the amount in the "Progress Report for Stewardship Credits, Integrated Resources Contracts or Agreements" as of September 30. Additional information on the Progress Reports available in CFLR Annual Report Instructions. "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 proposal and work plan.

3. Activities on the Ground

FY 2023 Agency Performance Measure Accomplishments[2] - Units accomplished should match the accomplishments recorded in the Databases of Record. Please note any discrepancies.

Core Restoration Treatments	Agency Performance Measure	NFS Acres	Non-NFS Acres	Total Acres
Hazardous Fuels Reduction (acres) in the Wildland Urban Interface	FP-FUELS-WUI (reported in FACTS)[3]	4880	670	5550
Hazardous Fuels Reduction (acres) in the Wildland Urban Interface - COMPLETED	FP-FUELS-WUI-CMPLT (reported in FACTS)[4]	5332		5332
Hazardous Fuels Reduction (acres) outside the Wildland Urban Interface	FP-FUELS-NON-WUI (reported in FACTS)[3]	2127		2127
Hazardous Fuels Reduction (acres) outside the Wildland Urban Interface - COMPLETED	FP-FUELS-NON-WUI-CMPLT (reported in FACTS)[4]	1349		1349
Wildfire Risk Mitigation Outcomes - Acres treated to mitigate wildfire risk	FP-FUELS-ALL-MIT-NFS (reported in FACTS)	747	670	1417
Prescribed Fire (acres)	Activity component of FP-FUELS-ALL (reported in FACTS)	7007		7007
Invasive Species Treatments (acres) - Noxious weeds and invasive plants	INVPLT-NXWD-FED-AC (reported in FACTS)[3]	454.9	994	1,448.9
Invasive Species Treatments (acres) - Noxious weeds and invasive plants - COMPLETED	INVPLT-NXWD-FED-AC-CMPLT (reported in FACTS)[4]	454.9	994	1448.9

[2] This question helps track progress towards the CFLRP projects lifetime goals outlined in your CFLRP Proposal & Work Plan. Adapt table as needed.

[3] For service contracts, the date accomplished is the date of contract award. For Force Account, the date accomplished is the date the work is completed

[4] New Agency measure reported in FACTS when completed

Core Restoration Treatments	Agency Performance Measure	NFS Acres	Non-NFS Acres	Total Acres
Invasive Species Treatments (acres) - Terrestrial and aquatic species	INVSPE-TERR-FED-AC (reported in FACTS)[35]	0	0	0
Invasive Species Treatments (acres) - Terrestrial and aquatic species - COMPLETED	INVSPE-TERR-FED-AC- CMPLT (reported in FACTS)[46]	0	0	0
Road Decommissioning (Unauthorized Road) (miles)	RD-DECOM-NON-SYS (Roads reporting)	0.918	0	.918
Road Decommissioning (National Forest System Road) (miles)	RD-DECOM-SYS (Roads reporting)	0	0	0
Road Improvement (High Clearance) (miles)	RD-HC-IMP-MI (Roads reporting)	0.76	0	.76
Road Improvement (Passenger Car System) (miles)	RD-PC-IMP-MI (Roads reporting)	0.907	0	.907
Road Maintenance (High Clearance) (miles)	RD-HC-MAINT-MI (Roads reporting)	0.3	0	.3
Road Maintenance (Passenger Car System) (miles)	RD-PC-MAINT-MI (Roads reporting)	36.793	0	36.793
Trail Improvement (miles)	TL-IMP-STD (Trails reporting)	0	0	0
Trail Maintenance (miles)	TL-MAINT-STD (Trails reporting)	184.668	0	184.668
Wildlife Habitat Restoration (acres)	HBT-ENH-TERR (reported in WIT)	6106.69	0	6106.69
Stream Crossings Mitigated (i.e. AOPs) (number)	STRM-CROS-MITG-STD (reported in WIT)	0	0	0
Stream Habitat Enhanced (miles)	HBT-ENH-STRM (reported in WIT)	6.88	0	6.88
Lake Habitat Enhanced (acres)	HBT-ENH-LAK (reported in WIT)	0	0	0
Water or Soil Resources Protected, Maintained, or Improved (acres)	S&W-RSRC-IMP (reported in WIT)	1.76	0	1.76
Stand Improvement (acres)	FOR-VEG-IMP (reported in FACTS)	663	0	663
Reforestation and revegetation (acres)	FOR-VEG-EST (reported in FACTS)	0	0	0
Forests treated using timber sales (acres)	TMBR-SALES-TRT-AC (reported in FACTS)	452	0	452
Rangeland Vegetation Improvement (acres)	RG-VEG-IMP (reported in FACTS)	112	0	112

- **Is there any background or context you would like to provide regarding the information reported in the table above?**

The Forest continues to move towards our updated extension goals and objectives. Due to litigation, one project has been significantly delayed others have had minor delays.

[3] For service contracts, the date accomplished is the date of contract award. For Force Account, the date accomplished is the date the work is completed

[4] New Agency measure reported in FACTS when completed

Reflecting on treatments implemented in FY23, if/how has your CFLRP project aligned with other efforts to accomplish work at landscape scales?

- The Colville Confederated Tribe reservation boundary abuts the entire southern boundary of the Vision 2020 landscape and includes our Dollar, Sanpoil, and Scatter project areas (Attachment A). We have active TFPA agreements with the CCT for work within our Sanpoil and Dollar project areas. We anticipate additional TFPA agreements relating to fuels treatments in the Vision 2020 landscape, particularly relating to the implementation of some larger prescribed burns along the boundary with the reservation.
- We coordinate with the Washington State DNR in designing and monitoring treatments in connection with State's 20-year Forest Health Strategic plan (WA DNR 2017). The Vision 2020 landscape includes three of the State's high priority areas (Republic, Dollar and a portion of Toroda-Tonata) – these three areas overlap with our Sanpoil, Walker, Tonata-Trout, and Dollar project areas. We've increased the pace and scale of treatments within the Vision 2020 landscape by using Good Neighbor Authority. Active work within four GNA sale areas is restoring lands within our East Wedge, Trout Lake, and Kettle Face project areas and has generated millions in stewardship receipts that are being leveraged to restore additional acres within the Vision 2020 area.
- All but two of the Vision 2020 project areas are within Ferry County. East Wedge and Summit Pierre are within Stevens County. Ferry and Stevens County have Community Wildfire Protection Plans that highlight areas for priority work such as around critical infrastructure and high density, interface and intermix WUI. The west and east boundaries of the Vision 2020 landscape include high density, interface, and intermix WUI conditions. We're completing high priority hazardous fuel reduction work to protect the Orient water supply, a primary power supply line for Ferry County, and other values at risk within WUIs.

4. Restoring Fire-Adapted Landscapes and Reducing Hazardous Fuels

Narrative Overview of <u>Treatments Completed in FY23</u> to restore fire-adapted landscapes and reduce hazardous fuels, 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?

Briefly, the inception of our Forest Vision 2020 project development was determined by forest health analysis that included assessment of reference conditions for Historic Range of Variability (HRV) using Forest, vegetation metrics as well as FRCC data. Further, the forest health analysis paired with local, County Wildfire Protection Plans (CWPP) and collaborative input from multiple stakeholders further refined specific NEPA project locations within the CFLR area, all aimed at restoring our landscapes and improving forest resiliency.

Reflecting over the duration of our Forest Vision 2020 project, the need to maintain the consistency of both our planning efforts and implementation work has been reinforced by alignment with the State's Forest Health Strategic plan, CCT collaboration and most recently the overlap of two High Priority Firesheds and National Priority Landscape (NPL) determination. The two firesheds encompass nearly a third of our CFLR area and the entirety of the area is included in the NPL.

To be successful in treating our heavy and dense fuel loads, our strategy for implementation has continued to pair mechanical and prescribed fire treatments. This consistently applied, series of treatments has been necessary to set our landscapes on a positive trajectory of restoration. It is important to note, that our prescribed fire treatments fall into a category of either underburning or pile burning, in which the latter significantly has lengthened our 'burn' window in consideration of air quality constraints.

FY 23 Activity Accomplished	Acres
Mechanical treatments (inclusive of commercial harvest, mastication, thinning and piling)	2,194 acres
Prescribed underburning	1,201 acres
Prescribed pile burning	2,446 acres

In past years we have had success in managing natural ignitions that met our desired conditions, and even more than doubled our acres of restoration in some cases. For this past summer, however, wildfire activity was considerably light in our CFLR area.

If a wildfire interacted with a previously treated area within the CFLRP boundary: N/A

FY23 Wildfire/Hazardous Fuels Expenditures

Category	$
FY23 Wildfire Preparedness*	$348,491
FY23 Wildfire Suppression**	No Managed Fires in CFLRP Area
FY23 Hazardous Fuels Treatment Costs (CFLN, CFIX)	$549,960
FY23 Hazardous Fuels Treatment Costs (other BLIs)	$669,732

* 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).

** Include emergency fire suppression and BAER within the project landscape.

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. (If not relevant for this year, note "N/A") N/A

5. Additional Ecological Goals

Narrative Overview of Treatments Completed in FY23 to achieve ecological goals outlined in your CFLRP proposal and work plan. This may include, and isn't limited to, activities related to habitat enhancement, invasives, and watershed condition.

The overarching goals for the Vision 2020 project are to restore forests and habitats, reduce hazardous fuels, use woody biomass and small-diameter trees, and reduce the costs of treatments and wildfire management. The Forest continues to plan and complete restoration treatments on whole watersheds.

6. Socioeconomic Goals

Narrative overview of activities completed in FY23 to achieve socioeconomic goals outlined in your CFLRP proposal and work plan.

Trail work Completed throughout 2023

Our recreation related partners have completed a great amount of work. Three of the larger organizations, Washington Trails Association (WTA), Pacific Northwest Trails Association (PNTA), and Evergreen Mountain Bike Association (EMBA) have all contributed a lot of time and helped improve various trail systems throughout the year. Having volunteers come

from the surrounding local communities, as well as further out, has put more meaning in the work that was accomplished. It has also strengthened relationships throughout organizations as well as between agencies. The Kettle Crest, an area where all three organizations have worked this past summer, has greatly benefited from this care in the form of these organizations holding various work parties to maintain system trails. Organizing, leading, and attending these work parties have been people who live locally or come from not so distance towns/cities. For example, the PNTA has staff members who live in the towns of Tonasket and Newport. Volunteers involved with PNTA and who have interest in working at places like the Kettle Crest come from various communities in Ferry and Stevens County all the way out to Spokane and various nearby places in Idaho. EMBA tries to pull from local schools and get teachers who may have interest as well as the time during the summer, to come work on trails. They also hold a yearly event "Kettle Fest" that brings in volunteers who camp at Jungle Hill and who then do several days of trail work (65 hours in total after this years event) on the Kettle Crest. All these organizations try to find local volunteers, as they know the level of care that would be put into the work and yearly maintenance.

Youth Involvement

These trail crews were not only made up of adult volunteers from local and other various communities, but the youth were also involved too. WTA this past summer had 12 chaperoned students from the St. George's School in Spokane, WA go on a weeklong backpacking trip on two Kettle Crest related trails, Profanity Peak #32 and Kettle Crest #13. On this backpacking trip, about 1.5 days of trail work was completed on the two mentioned trails. PNTA has tried to do something similar by doing outreach to places like Selkirk High School in north Pend Oreille County, to Oroville High School in north Okanogan County, and all the communities places in between: Colville, Kettle Falls, Northport, Republic, Tonasket. Regular participants tend to come out of Omak and the Okanogan area. The Curlew Job Corp has a good working relationship with PNTA and has helped complete trail work throughout the Kettle Crest area. Finally, EMBA has plans to create crews staffed by locals, some who may be younger people interested in getting involved with trail work. These organizations, as well as others not mentioned but who are still vitally important, know the value in getting local youth interested and involved with trail maintenance. These will be the people who help carry these organizations mission and good work on the landscape further as we look out to the future.

Results from the Treatment for Restoration Economic Analysis Toolkit (TREAT). For guidance, training, and resources, see materials on Restoration Economics SharePoint.[7] After submitting your data entry form to the Forest Service Washington Office Economist Team, they will provide the analysis results needed to respond to the following prompts.

Percent of funding that stayed within the local impact area: 46%

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

Description	Project Percent
Equipment intensive work	30
Labor-intensive work	13
Material-intensive work	0
Technical services	0
Professional services	57
Contracted Monitoring	0
TOTALS:	100%

Modelled Jobs Supported/Maintained (CFLRP and matching funding):
Copy/paste totals from the All Funds tab of the TREAT spreadsheet

[7] Addresses Core Monitoring Question #7

Jobs Supported/Maintained in FY 2023	Direct Jobs (Full & Part-Time)	Total Jobs (Full & Part-Time)	Direct Labor Income	Total Labor Income
Timber harvesting component	38	54	3,728,230	5,195,803
Forest and watershed restoration component	16	28	1,096,869	1,875,788
Mill processing component	43	105	3,278,583	6,775,315
Implementation and monitoring	27	34	1,068,970	1,422,239
Other Project Activities	1	2	17,064	65,096
TOTALS:	124	222	9,189,715	15,334,241

- **Were there any assumptions you needed to make in your TREAT data entry you would like to note here? To what extent do the TREAT results align with your observations or other monitoring on the ground**?
  Results look good and are consistent with expectations: CFLR specific funding and full project funding both decreased, while harvest went up compared to last year, and results changed accordingly.

Please provide a brief description of the local businesses that benefited from CFLRP related contracts and agreements, including characteristics such as tribally-owned firms, veteran-owned firms, women-owned firms, minority-owned firms, and business size.[8] For resources, see materials here (external Box folder).
Three local small businesses and 2 local state agencies were contracted to do work in the CFLRP. One business was a woman owned sole proprietorship. The women owned small business was also a self-certified small disadvantaged business.

7. Wood Products Utilization

Timber & Biomass Volume Table[9]

Performance Measure	Unit of measure	Total Units Accomplished
Volume of Timber Harvested TMBR-VOL-HVST	CCF	8,692
Volume of timber sold TMBR-VOL-SLD	CCF	34,329
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	6,339

Northeast Washington has a full spectrum of product utilization sites within cost-effective transportation distances. Eight sawmills, one plywood plant, one cross-laminated timber (CLT) plant, three pulp and paper plants, one cogeneration facility, and three pellet processing plants are within the CNF's market area.

Because of the sound infrastructure base, there are markets available for our diverse forest restoration by-products. The key sawmills emphasize small-diameter trees, a few saw mills accept larger diameters, and one is focused solely on cedar. Our new CLT plant in Colville uses small dimension lumber and upgrades it into high-value mass timber products, including innovations like portable bridge girders for temporary stream crossings. The local biomass-to-energy plant consumes huge volumes of woody biomass from timber mills and is experimenting with clean slash residue from forest restoration.

[8] Addresses Core Monitoring Question #8
[9] Addresses Core Monitoring Question #10

8. Collaboration

Please include an up-to-date list of the core members of your collaborative if it has changed from your proposal/work plan (if it has not changed, note below).[10] For detailed guidance and resources, see materials here. Please document changes using the template from the CFLRP proposal and upload to Box. Briefly summarize and describe changes below.

The only change to the list is due to a retirement. The WDFW representative retired, but his replacement will take his place on the collaborative.

9. Monitoring Process

Briefly describe your current status in terms of developing, refining, implementing, and/or reevaluating your CFLRP monitoring plan and multiparty monitoring process.

From October 2022 through April 2023, the Forest engaged with over a dozen partners from the Northeast Washington Forest Coalition (NEWFC), local tribes (Confederated Tribes of the Colville Reservation, Kalispel Tribe), non-profits (Conservation Northwest), and the state (Washington Depts. of Natural Resources, Fish & Wildlife) to develop a monitoring plan that utilizes the CFLRP Common Monitoring Strategy. Local forest staff and researchers from the USFS Pacific Northwest and Rocky Mountain Research Stations also contributed time and input in this process. The Northeast Washington CLFRP Monitoring Plan capitalizes on ongoing forest- and project-level monitoring, prior monitoring efforts that occurred during the first ten years of the NEW Forest Vision 2020 CFLRP, and monitoring by Washington Department of Natural Resources as part of their Eastern Washington 20-Year Forest Health Strategic Plan.

Interested partners and the forest met 15 times to discuss monitoring questions and indicators intended to supplement the existing Common Monitoring Strategy (CMS). Subcommittees were focused on either ecological indicators or social and economic indicators. The cadre of partners categorized, assessed, and prioritized monitoring questions provided by CNF specialists and stakeholders into the final set of 26 sub-questions (in addition to the 13 common indicator questions) addressed in the Northeast Washington CFLRP Monitoring Plan, which was finalized in April 2023. The Forest is currently working with key partners (WDNR, WDFW, USFS PNWRS) to get agreements in place to collect data on some of the supplemental monitoring questions that were developed as part of this process.

Additionally, the Forest established 90 of 100 on-the-ground invasive monitoring plots in active projects within the NEW Forest Vision 2020 boundary to address the CMS question #5 over the summer and fall of 2023. This pre-treatment data is being compiled and analyzed by the region and will be used to track trends in invasive species over the coming years.

As described in the 2012 NEW Forest Vision 2020 Monitoring Proposal (Colville National Forest 2012), “Monitoring provides essential feedback for the adaptive management process, whereby practitioners learn from successes and failures and take corrective action in future restoration project planning and implementation.” As in the first round of monitoring, each cycle of restoration project planning will be guided by the previous cycle of monitoring. Each successive cycle increases the CFLRP monitoring cadre’s ability to capture ecological variation correlated with implementation of the restoration projects and use that information to inform and facilitate adaptive management of future projects. This adaptive management process will also be applied to the monitoring approach and the plan and protocols will be updated as the monitoring cadre learns and adapts to the needs of the projects. As during the first

[10] Addresses Core Monitoring Question #11

round of monitoring, if the results of a monitoring project are not providing clear answers, project design will be adapted and improved upon, and if they provide clear answers and new questions arise during implementation of restoration projects in the next 2-year cycle, old questions may be dropped in favor of new questions deemed more important to answer.

10. Conclusion

Describe any reasons that the FY 2023 annual report does not reflect your proposal or work plan. Are there expected changes to your FY 2023 plans you would like to highlight?

Due to litigation, the Sanpoil project has been put on hold. Other projects were modified based on the litigation. This has reduced the amount of projects we were able to implement. However, we were able to complete the amount of fuels reduction planned.

Optional Prompts

FY 2023 Additional Accomplishment Narrative and/or Lessons Learned Highlights

Media Recap
None available

Visuals
Three photos below; a before, during, and after. They represent a project in our Vision 2020 area aimed at reducing ladder and surface fuels. The suite of treatments consisted of hand thin and pile, followed by a pile burn.
The first photo is before the occurrence of any treatment, the second is post thin and pile, and third is post pile burning.

Further information regarding the photos. The specific project location was along a state highway that crosses through our Vision 2020 area. Treatment opportunity specific to that location was limited to only hand treatments due to RHCA restrictions. The additional goal for that location other than stand resiliency, was to increase the success of any future fire suppression activity that might occur along the highway corridor.

Signatures

Recommended by (Project Coordinator(s)): /s/ Justina Dumont
Approved by (Forest Supervisor(s)): /s/ Josh White
Draft reviewed by (collaborative representative): /s/ Kurtis Vaagen

Attachment: CFLRP Common Monitoring Strategy Core Questions

The 2022 cohort will complete the Common Monitoring Strategy questions in FY23. The 2022 cohort includes: Lakeview, Missouri Pine Oak Woodlands, North Yuba, North Central Washington, Northeast Washington, Rio Chama, Rogue Basin, Shortleaf Bluestem, Southern Blues, Southwest Colorado, Western Klamath, Zuni

2021 funded projects (Deschutes, Dinkey, Northern Blues) will only need to address the annual questions (Q1, Q5, Q7, Q10, Q11, Q13). For CFLRP projects awarded (or extended) in FY23, the Attachment is NOT required. However, please note it will be required in FY24.

The CFLRP Common Monitoring Strategy is designed to reflect lessons learned from the first ten years of the program, expand monitoring capacity, and improve landscape-scale monitoring. It is intended to strike a balance between standardization and local flexibility and to be responsive to feedback that more guidance and capacity are needed. Questions are standardized nationally and indicators are standardized regionally. Many CFLRP projects have been implementing restoration treatments and monitoring progress prior to the Common Monitoring Strategy. This effort may not capture the progress of every project over its lifetime but provides an opportunity for all projects to take a step together in a unified monitoring approach.

- Question 1: "What is the reduction in fuel hazard based on our treatments?"
- Question 2: "What is the effect of the treatments on moving the forest landscape toward a more sustainable condition?"
- **Question 3: "What are the specific effects of restoration treatments on the habitat of at-risk species and/or the habitat of species of collaborative concern across the CFLRP project area**"
- Question 4: "What is the status and trend of watershed conditions in the CFLR area, with a focus on the physical and biological conditions that support key soil, hydrologic and aquatic processes?"
- Question 5: "What is the trend in invasive species within the CFLRP project area?"
- Question 6: "How has the social and economic context changed, if at all?"
- Question 7: "How have CFLRP activities supported local jobs and labor income?"
- Question 8: "How do sales, contracts, and agreements associated with the CFLRP affect local communities?"
- Question 9: "Did CFLRP maintain or increase the number and/or diversity of wood products that can be processed locally?"
- Question 10: "Did CFLRP increase economic utilization of restoration byproducts?"
- Question 11: "Who is involved in the collaborative and if/how does that change over time?"
- Question 12: "How well is CFLRP encouraging an effective and meaningful collaborative approach?"
- Question 13: "If and to what extent have CFLRP investments attracted partner investments across the landscapes?"

The tables in the section below are copy/pasted from the suggested monitoring tracking templates to help organize data across CFLRP projects. Adapt the reporting tables as needed to align with regional monitoring indicators.

Monitoring Question #1: "What is the reduction in fuel hazard based on our treatments?"

For detailed guidance, training, and resources, see corresponding reporting template here. Use it to respond to the following prompts:

Table 1. Fire intensity (predicted flame lengths) from IFTDSS

IFTDSS Auto-97th percentile flame length output	*Non-burnable*	*0 – 1ft. flame lengths*	*1 - 4 ft. flame lengths*	*>4 - 8 ft. flame lengths*	*>8 - 11 ft. flame lengths*	*>11 - 25 ft. flame lengths*	*>25 ft. flame lengths*
Initial landscape model (Baseline under CMS)	22,139 ac 2.4%	294,730 ac 32.2%	436,285 ac 47.6%	96,775 ac 10.6%	29,593 ac 3.2%	32,892 ac 3.6%	3,988 ac 0.4%
Landscape model 2 (Second year of CMS) N/A in first reporting year	N/A for all						

- **Briefly describe monitoring results in table above – include an interpretation of the data provided and whether the indicator is trending toward or away from desired conditions for your landscape.**

We will consider the data this year to be baseline, but a few observations are worth noting.

We have focused on restoration and fuels reduction in our Vision 2020 landscape for a dozen years, and seeing the larger percentages of lower flame lengths indicates that we have made positive strides with our suite of treatments, and are trending towards desired conditions.

Portions of our landscape have mesic and mixed vegetation types that higher flame lengths are to be expected. Overall, furthering treatments that continue to reduce flame lengths will help set the stage for our forest to be resilient during the high percentile fire days.

Table 2. Crown fire activity from IFTDSS - IFTDSS Auto-97th crown fire activity output by watershed - Initial landscape model (Baseline under CMS)

Watershed Name	Unburnable	Surface Fire	Passive Crown Fire	Active Crown Fire	Crown Fire (combined)
Sherman Creek-Franklin D Roosevelt Lake	3,757.8 ac 2.8%	74,962.6 ac 55.6%	56,188 ac 41.6%	7.6 ac 0%	56,195.6 ac 41.7%
Hall Creek	757.3 ac 0.9%	48,505.4 ac 55.9%	37,556 ac 43.3%	.4 ac 0 %	47,556.6 ac 43.3%
Harvey Creek-Franklin D Roosevelt Lake	0.4 ac 4.3%	6.9 ac 66%	3.1 ac 29.8%	0 ac	3.1 ac 29.8%
Toroda Creek	0.0 ac	6.2 ac 51.9%	5.8 ac 48.1%	0.0	5.8 ac 48.1%
Curlew Creek	1,165.1 ac 2.3%	35,812.4 ac 69.8%	14,338.7 ac 27.9%	0.0	14,338.7 ac 27.9%
Deadman Creek-Kettle River	3,146.7 ac 3.1%	64,977.7 ac 63.7%	33,847.8 ac 33.2%	0.7 ac 0%	33,848.5 ac 33.2%
Upper Sanpoil River	5,919.9 ac 3.3%	104,591.3 ac 57.7%	70,637.4 ac 39.0%	1.8 ac 0%	70,639.2 ac 39.0%
West Fork Sanpoil River	566.7 ac 2.3%	22,865.7 ac 91.0%	1,695.5 ac 6.7%	0.4 ac 0%	1,696 ac 6.7%
Middle Sanpoil River	1,742.7 ac 4%	27,122.6 ac 62.3%	14,693.4 ac 33.7%	1.3 ac 0%	14,694.7 ac 33.7%
Vulcan Mountain-Kettle River	1,234.1 ac 2.3%	37,305.1 ac 68.9%	15,630.8 ac 28.9%	0.0	15,638.8 ac 28.9%
Boulder Creek-Kettle River	1,822.5 ac 1.2%	90,080.7 ac 61.7%	54,075.7 ac 37.0%	6.7 ac 0%	54,082.4 ac 37.0%
Big Sheep Creek	114.8 ac 0.4%	18,938.0 ac 71.6%	7,411.1 ac 28.0%	.04 ac 0%	7,411.5 ac 28.0%
Onion Creek-Franklin D Roosevelt Lake	1,895.5 ac 2.9%	48,447.6 ac 75.0%	14,215.5 ac 22.0%	0.0	14,215.5 ac 22.0%
N/A for all					

- **Briefly describe monitoring results in table above – include an interpretation of the data provided, and whether the indicator is trending toward or away from desired conditions for your landscape.**

We will consider the data this year to be baseline.

Briefly, a 'shapshot' of this baseline data indicates that overall, we have been trending in a positive direction the past dozen years. Ultimately, our aim is resiliency and being able to successfully manage wildfires for benefit even during the highest percentile days. We have vegetation conditions that will always result in higher fire activity, but continuing treatments in many of our watersheds to further limit higher fire activity is important to achieve our resiliency goals.

- **Does your CFLRP project have additional hazardous-fuels related monitoring results to summarize and interpret?**

Not at this time.

- **Based on the information in this section, (and any other relevant monitoring information and discussion), what (if any) actions or changes are you considering?**

No specific changes to consider. It is interesting to note that in some of the watersheds with higher percentile of passive crown fire represent, generally, locations where we have not completed all our treatment goals or have yet to initiate our restoration work. It will be interesting to note the monitoring effects the next few years as we complete and start some treatments in those areas.

Monitoring Question #2: "What is the effect of the treatments on moving the forest landscape toward a more sustainable condition?" (Reporting frequency determined by Regional indicator)

Improving landscape resilience is a key goal of Collaborative Forest Landscape Restoration Program (CFLRP). A useful metric to assess broad-scale resilience is departure from the Natural Range of Variability (NRV) of the landscape. Landscapes functioning within NRV are assumed to be more resilient to disturbances and sustainable over time than those outside NRV. Estimating landscape departure is a coarse filter approach to assessing biodiversity, since landscape viability is presumed to include the viability of the species within it. This does not apply to rare habitats and their associated species, but it is a useful benchmark of how well landscapes are functioning overall. We can also track how management treatments are affecting NRV and design treatments to move the landscape in the direction of greater viability.

Table 1: Vegetation Departure Summary

Table 2: Vegetation Departure by Biophysical Setting

Succession Class	**Early Development**	**Mid Closed**	**Mid Open**	**Late Open**	**Late Closed**
Area (acres)	22,864	351,588	232,791	24,807	77,851
% total project Area	3%	50%	33%	3%	11%
Acres departed	(43,370)	264,813	30,068	(209,524)	(44,692)

Biophysical Setting (total acres / percent of forested project area)	**Acres by Succession Class Early Development**	**Acres by Succession Class Mid Closed**	**Acres by Succession Class Mid Open**	**Acres by Succession Class Late Open**	**Acres by Succession Class Late Closed**
Dry Ponderosa Pine – Mesic (713 ac / 3%)	(573)	7,112	(4,786)	(5,798)	4,758
Mixed Conifer - Eastside Dry (415,533 ac / 59%)	(37,446)	279,257	(31,620)	(188,737)	(15,928)
Mixed Conifer - Eastside Mesic (40,711 ac / 6%)	(2,660)	(573)	13,513	(2,727)	(3,638)
Northern Rocky Mountain Mesic Montane Mixed Conifer Forest (78,136 ac / 11%)	(7,472)	9,934	31,171	(8,851)	(26,538)
Spruce – Fir (151,617 ac / 21%)	3,552	(30,790)	22,852	(3,410)	(3,346)
Subalpine Woodland (2,499 ac / <1%)	1,228	(126)	(1,062)		
Grand Total (709,901 ac / 100%)	(43,370)	264,813	30,068	(209,524)	(44,692)

Please note that results for biophysical settings should be interpreted with some caution at this finer spatial scale. Within this analysis, departure from NRV conditions is calculated at different spatial scales depending on the Fire Regime Group (FRG) for the biophysical setting. Biophysical settings from FRG 1&2 are calculated at the HUC5 are more appropriate to interpret at finer spatial scales. Biophysical settings in FRG 3 and 4&5 are calculated at HUC4 and ILAP eco-region levels, respectively, and as such these results may include more area outside of the CLFRP boundary. It should be noted that the biophysical environments do not match the forest vegetation types or the HRV ranges provided in the Colville National Forest LRMP.

Briefly summarize how your landscape has departed from historic ecological conditions including disturbance.

The landscape has an excess of middle structure, with the major excess being in mid closed, and a deficit of early development, late open and late closed. These departures primarily derive from fire deficits on the landscape. The mid closed structure/successional class has the highest need for disturbance and/or succession to move the landscape into the early development and late classes. The mixed conifer – Eastside dry biophysical setting represents about 60 percent of the Vision 2020 forested acres and has the largest of acres in need of disturbance and/or succession.

Briefly describe monitoring results – include an interpretation of the data provided above, and whether the indicator is trending toward or away from desired conditions for your landscape (including resiliency to future disturbances and climate projections). If the data above does not accurately reflect condition on your landscape, please note and provide context.

Vision 2020 treatments are trending the project landscape towards desired conditions for open structure (mid open and late open), which is currently the largest departure of all structure/successional classes. There is a deficit of nearly 250,000 acres of open structure. Residual trees in these treatments are responding by improving in vigor and expanding crowns. Understory cover is responding with increases in grass and herbaceous cover. The improved vigor and reduced

fuels make these treated areas more resilient to disturbances and provides improved opportunities to move these treated areas from middle structure into both late open and late closed structures. Figure 1 shows the response of the understory to treatments that create open structure. Small openings are generally missing from the untreated landscape, yet they were an important component of a diverse landscape and impacted how fire moved through the landscape. Overall, treatments create opportunities for fire management to leverage beneficial wildfire that can increase the amount of open forest structure at larger scales than mechanical treatments and prescribed fire alone.

Figure 1. Example of open forest structure and response of understory huckleberries

Vision 2020 treatments are moving some acres into early development but not enough to catch up with the deficit of acres in this structure/successional class. Social concerns tend to be the primary constraint to the creation of the early developmental class. Recent fires have added to the early developmental class, but the opening sizes tend to be outside of the historic range of variability; this highlights the need for treatments to leverage the work of wildfire towards desired outcomes.

Treatments have been successful at moving mid closed structure, which is highly overrepresented, into mid open. This has trended towards desired open forest conditions that are highly needed in the dry ponderosa pine mesic and mixed conifer eastside mesic biophysical settings. There are some biophysical settings (mixed conifer Eastside mesic, Northern

Rocky Mountain mixed conifer, and spruce-fir) where this movement from mid closed to open has moved conditions away from desired structural/successional conditions in the short term but has resulted in desirable outcomes for improved vigor, improved resilience to disturbance, species composition reflective of reference conditions, growing space for regeneration of seral trees, spatial heterogeneity, and accelerated advancement to late closed where it's needed (Northern Rocky Mountain mixed conifer). Figures 2 and 3 show a treatment in East Trout GNA within Northern Rocky Mountain mixed conifer that moved mid closed to mid open; the result is that aspen are freed from conifer encroachment and have responded with vigorous suckering with thousands of sprouts per acre and sprout heights 5 to 10 feet. Aspen and other hardwoods are underrepresented on the landscape and they are valuable to wildlife and reduce rate of fire spread and crown fire since they have higher live fuel moisture contents.

Figure 2 Mid closed forest in East Trout GNA

Figure 3 Mid closed forest aspen treatment in East Trout GNA

Monitoring Question #3: "What are the specific effects of restoration treatments on the habitat of at-risk species and/or the habitat of species of collaborative concern across the CFLRP project area?"

For detailed guidance, training, and resources, see corresponding reporting template here. Use it to respond to the following prompts:

If reporting on indicator 1 or 2 (wildlife habitat indicators), fill in this table:

Wildlife Habitat Descrip.	Regional or Project-Specific Indicator?	Indicator and Unit of Measure	Target Range	Value in Initial Year of CMS*	Value in Next Reporting Year of CMS* N/A in 2023	Desired or Undesired Change? N/A in 2023	Percent Change N/A in 2023	Acres of Habitat Treated to Improve this Indicator in this Fiscal Year
Early seral Dry Ponderosa Pine Mesic	Regional	Departure from HRV (acres)	2,042.1 – 2,894.6	1,577.2 (77.2%) (below)	N/A	N/A	N/A	0.0 (0.0%)
Mid-late seral (open) Dry	Regional	Departure from HRV (acres)	15,979.4 – 18,620.0	5,395.3 (33.8%)	N/A	N/A	N/A	5.9 (0.1%)

Ponderosa Pine Mesic				(below)				
Mid-late seral (closed) Dry Ponderosa Pine – Mesic	Regional	Departure from HRV (acres)	1,511.4 – 2,562.6	14,432.7 (954.9%) (above)	N/A	N/A	N/A	8.1 (0.1%)
Early seral Mixed Conifer – Eastside Dry	Regional	Departure from HRV (acres)	49,718.5 – 69,316.6	12,272.6 (24.7%) (below)	N/A	N/A	N/A	25.5 (0.2%)
Mid-late seral (open) Mixed Conifer – Eastside Dry	Regional	Departure from HRV (acres)	313,122.1 – 369,444.4	93,545.2 (29.9%) (below)	N/A	N/A	N/A	1117.1 (1.2%)
Mid-late seral (closed) mixed conifer eastside dry	Regional	Departure from HRV (acres)	42,464.9 – 63,097.3	309,715 (729.3%) (above)	N/A	N/A	N/A	1,103.0 (0.4%)
Early seral Mixed Conifer – Eastside Mesic	Regional	Departure from HRV (acres)	3,394.8 – 4,541.4	735.0 (21.6%) (below)	N/A	N/A	N/A	2.6 (0.4%)
Mid-late seral (open) Mixed Conifer – Eastside Mesic	Regional	Departure from HRV (acres)	7,811.6 – 11,181.2	20,300.2 (259.9%) (above)	N/A	N/A	N/A	280.8 (1.4%)
Mid-late seral (close) mixed conifer eastside mesic	Regional	Departure from HRV (acres)	23,672.7 – 27,787.1	19,676.1 (83.1%) (below)	N/A	N/A	N/A	193.4 (1.0%)
Early seral Northern Rocky Mountain Mesic Montane Mixed Conifer	Regional	Departure from HRV (acres)	9,302.3 – 13,019.3	1,830.1 (19.7%) (below)	N/A	N/A	N/A	22.1 (1.2%)
Mid-late seral (open) Northern Rocky Mountain Mesic Montane Mixed Conifer	Regional	Departure from HRV (acres)	12,173.0 – 18,939.0	36,901.5 (303.1%) (above)	N/A	N/A	N/A	427.8 (1.2%)
Mid-late seral (closed) Northern Rocky Mountain Mesic Montane Mixed Conifer	Regional	Departure from HRV (acres)	51,812.7 – 60,719.2	39,404.1 (76.0%) (below)	N/A	N/A	N/A	273.6 (0.7%)
Early seral (open) Spruce-Fir	Regional	Departure from HRV (acres)	438.0 – 948.4	4,500.8 (1,027.6%) (above)	N/A	N/A	N/A	0.22 (0.005%)
Early seral (closed) Spruce-Fir	Regional	Departure from HRV (acres)	34,921.2 – 44,998.7	4,130.8 (11.8%) (below)	N/A	N/A	N/A	0.0 (0.0%)

Mid-seral (open) Spruce-Fir	Regional	Departure from HRV (acres)	23,088.0 – 29,348.9	19,678.1 (85.2%) (below)	N/A	N/A	N/A	2.4 (0.01%)
Mid-late seral (closed) Spruce-Fir	Regional	Departure from HRV (acres)	92,198.7 – 113,439.2	123,307.4 (133.7%) (above)	N/A	N/A	N/A	Lynx 3.8 (0.003%) NOGO 416.9 (0.3%)

*Common Monitoring Strategy (CMS)

- **For each row in the table above, briefly discuss the connection of the habitat to one or more at-risk species/special of collaborative concern that in habitat or need that habitat. Then explain any key technical points about the monitoring results you reported in the table, such as assumptions, limitations, confounding factors, hypotheses, etc. If you are only reporting "acres treated" or "miles treated" to answer this core monitoring question, explain how you are verifying that the areas being treated are benefiting at-risk species and/or species of collaborative concern. You may also choose to include links to other supporting materials.**

Big game species are represented by early and mid-late open seral dry ponderosa pine mesic, mixed conifer eastside dry, mixed conifer eastside mesic, northern Rocky Mountain mesic montane mixed conifer, and early seral open and mid-seral open spruce-fir wildlife habitats. It is assumed that all treatments conducted within the Northeast Washington CFLRP area on the Colville National Forest were beneficial in promoting foraging habitat for big game.

Northern goshawks are represented by mid-late seral closed dry ponderosa pine mesic, mixed conifer eastside dry, mixed conifer eastside mesic, northern Rocky Mountain mesic montane mixed conifer, and spruce-fir wildlife habitats. A proportion of these habitat types are significantly above HRV (closed dry ponderosa pine mesic, mixed conifer eastside dry, and spruce-fir) while the others are below. It is assumed that any commercial treatments would reduce nesting habitat while pre-commercial or small diameter thinning, prescribed burning, and low-intensity wildfire would enhance habitat. Only enhancement treatment acres are used in the calculations in the table above.

Canada lynx are represented only within the spruce-fir vegetation type. Foraging habitat consists of early seral open, early seral closed, mid seral open, and mid-late seral closed structures. It is assumed that any treatments resulting in a reduction in understory would reduce habitat for Canada lynx, this includes wildfire. Treatments that promote understory include commercial only thinning, planting, and seeding. Only enhancement treatment acres are used in the calculations in the table above.

- **Briefly interpret the monitoring results in the table above, including whether the indicator is trending toward or away from desired conditions for your landscape.** If the data above does not accurately reflect conditions on your landscape, please note that and provide context.

We will consider the data this year to be baseline.

- **Does your CFLRP project have additional wildlife-related monitoring results to summarize and interpret?** If so, please provide that here.

Monitoring Question #4: "What is the status and trend of watershed conditions in the CFLRP area?"

For detailed guidance, training, and resources, see corresponding reporting template here. Use it to respond to the following prompts:

Summary of Watershed Condition Scores for the priority HUC12 watersheds within CFLRP boundary:

HUC12 Watershed Name and 12-digit HUC	Watershed Condition Score in Initial Year of CMS
South Fork Sherman Creek, 170200011301	Functioning at Risk
Upper Sherman Creek, 170200011302	Functioning at Risk
Lower Sherman Creek, 170200011303	Functioning at Risk
Barnaby Creek, 170200011306	Functioning at Risk
Lambert Creek, 170200021302	Functioning at Risk
Saint Peter Creek, 170200021304	Functioning at Risk
West Deer Creek, 170200021705	Functioning at Risk
Lone Ranch Creek, 170200021706	Functioning at Risk
Little Boulder Creek, 170200021903	Functioning at Risk
South Fork Boulder Creek, 170200021905	Functioning at Risk
North Fork Boulder Creek-Boulder Creek, 170200021906	Functioning at Risk
East Deer Creek-Kettle River, 170200021907	Functioning at Risk
North Fork Deadman Creek, 170200022002	Functioning Properly
Deadman Creek, 170200022003	Functioning Properly
North Fork Sanpoil River-Sanpoil River, 170200040101	Functioning at Risk
O`Brien Creek, 170200040102	Functioning at Risk
Ninemile Creek, 170200040107	Functioning at Risk
Thirteenmile Creek-Sanpoil River, 170200040108	Functioning Properly

Watershed Condition Score averaged across all affected identified subwatersheds within CFLRP boundary:

Indicator Number	Indicator Name	Avg. Indicator Value	Date
Aquatic Physical (Weighted 30%)			
1	Water Quality	1	
2	Water Quantity	1	
3	Aquatic Habitat	2	
Aquatic Biological (Weighted 30%)			
4	Aquatic Biota	2	
5	Riparian/Wetland Vegetation	2	
Terrestrial Physical (Weighted 30%)			
6	Roads & Trails	2	
7	Soils	1	
Terrestrial Biological (Weighted 10%)			
8	Fire Regime or Wildfire	2	

9	Forest Cover	1	
10	Rangeland Vegetation	1	
11	Terrestrial Invasive Species	1	
12	Forest Health	1	

Avg Watershed Condition Score: 1.6

- **Briefly interpret the monitoring results in the table above, including whether the indicator is trending toward or away from desired conditions for your landscape.** If the data above does not accurately reflect watershed condition on your landscape, please note that and provide context.
- **Does your CFLRP project have additional watershed condition-related monitoring results to summarize and interpret?** If so, please provide that here.

This year is the first year of documenting the trend data there is no trend available. Projects are planned in the next several years for watersheds functioning-at-risk. The watershed conditions will be reevaluated during these projects and we expect them to move from function-at-risk to functioning. Upcoming projects will target improvements in roads and trails, fire regimes/wildfire, aquatic biota, riparian/wetland vegetation, and aquatic habitats and improvements are expected over time in those indicators.

Monitoring Question #5: "What is the trend in invasive species within the CFLRP project area?"

For reporting on plot-based field monitoring, please include a summary of the results here:

This document contains baseline findings for invasive species trends for the Northeast Washington CFLRP FY 23 which addresses the Common Monitoring Strategy Question 5 (Invasive species trends). In total, 87 circular plots were monitored areas from 8/21/2023 to 10/16/2023. Total percent cover for invasive plants, bare soil, and litter and duff were recorded at each .1 acre plot. Invasive plants were identified to species and ocular cover estimates were recorded for each plant. Past treatment types, plot center photos and location notes were also gathered to revisit plots on a 2-year cycle. There were 27 treated plots and 14 untreated plots. Invasives were found on 41 plots: 27 of which were treated (59% of treated plots), and 14 were untreated (34% of untreated plots). Plots were determined as treated if thinning, burning, or other combinations of treatments occurred within the last 15 years. Average invasive percent cover was calculated by species with a species-plot matrix in Microsoft Excel.

OBJECTIVES

- Treat invasive plants within the Border Planning area on the forest.
- Established monitoring plots to see whether our CFLRP treatments (thinning, prescribed burning) are leading to increased invasive plant populations.

INTRODUCTION

Two different efforts were funded under CFLRP restoration dollars to control invasive plants within a project boundary on the Forest and to monitoring the results of planned project implementation. The first project consisted of a pre-treatment by means of herbicide to control, eradicate, and prevent the spread of invasive plants. A pre-treatment in the Border Planning area was executed to accomplish these goals. Herbicide treatments were conducted along the major road systems

with the specified planning area. The second project was setting up monitoring plots to evaluate the current condition. These monitoring plots which were set up, were established to identify what the current species composition is compared to what invasive plants are present on site before project planning activities are conducted. The planned activities are composed of timber removal, thinning, fuels reduction, prescribed fire, and restoration activities. Several of these activities are sources of soil disturbance and have the potential to effect invasive plants. The establishment and spread of invasive plants will be monitored under this effort.

BORDER PLANNING AREA FUNDING

Restoration funding was secured under a contract this field season to conduct herbicide treatments within the Border Planning area. The contract was awarded to Timberline Silvics Inc. to conduct a pre-treatment of invasive plants before soil disturbing activities occurred through planned project implementation.

ACCOMPLISHMENTS

- Border Planning Area – Treated 288.9 acres of invasive plants
- Region 6 – CFLRP Inavasive Plant Monitoring – completed approximately 90 out of 120 monitoring sites regarding establishment and reading of species composition in relationship to invasive plant presence
    - Monitoring is expected to be completed next fields season

BORDER PLANNING AREA – PRE-TREATMENT OVERVIEW

The pre-treatment conducted within the Border Planning area is a small portion of the overall picture pertaining to the management of invasive plants. An explanation of herbicide treatments, Forest Plan components/objectives, and information on how the plan fits into the rest of the resource management on the across the forest is explained below.

The current forest plan has analyzed the extent and population of invasive plants on the Colville National Forest. The analysis reports that invasive plants occupy approximately 20,000 acres within the forest boundary. The analysis concludes there is an annual increase of the invasive plant population by 8 to 12 percent. Through prevention, education, and mitigation measures which are applied at all levels of management, the increase of invasive plants is reduced approximately in half or 4 to 6 percent. This leaves an annual increase of approximately 5 percent. This is where annual treatments through an integrated approach across the forest and during planning implementation becomes critical for controlling the increase of invasive plants and maintaining viable plant communities on the landscape.

The forest has an annual objective to treat 2,000 acres per year, actively restore an annual average of 50 acres of native vegetation and treat on average of 10 acres focused on invasive plants/non-native plants within research natural areas.

During the expected 15 years of plan implementation, reduce the density or extent of invasive plants by treating an average of 2,000 acres per year. Actively restore an annual average of 50 acres of native vegetation by mulching, seeding, or planting to promote revegetation of native plants to help resist introduction, establishment, and spread of invasive plant species.

Most of these infested areas are located along roads and south facing slopes on low elevation areas within the forest boundary. Sites such as dry forest, dry grass, dry shrub, and cool shrub types are areas known to be susceptible for the establishment of invasive plants. The spread of invasive plants on the Forest are spread by natural means such as: birds, wildlife, insects, wind, water, wildfire, and natural erosion processes. The other way invasive plants are established are through human related activities such as: hay, vehicles, equipment, riding stock, pack stock, hiking, and livestock grazing. Activities which create soil disturbances are directly related to invasive plant establishment, occupancy, and viability as well. Although soil disturbance is not the only factor which creates areas where unwanted plants can establish, it is related to management activities that are occurring on the forest. Specific activities like timber, vegetation treatments, road construction, road decommissioning, road maintenance, livestock grazing, fire, fuels management, recreation, and mining are all corelated with soil disturbing activities.

The forest is managed for several uses and the forest plan has outlined the desired condition, objectives, standards, and guidelines to mitigate the impacts while keeping invasive plants within a set control. The forest developed an integrated

approach to manage invasive plants to ensure plant communities would remain viable for the long-term. Prevention measures, inventory, monitoring, treatments, and education are all apart of the long-term management approach for trending the forest towards its desired condition. The desired condition further outlines the expectations for that invasive plants do not threaten the capability of the forest and emphasizes prevention, early detection, and timely treatments to accomplish this task.

The invasive plants program has implemented treatments on the forest for control and has typically reached the annual objectives regarding the number of acres treated on an annual basis for invasive plants. The consistent approach is focused on soil disturbing activities from vegetation treatments. A pre and post treatment has been applied since before the current plan was signed into decision. Restoration and monitoring are now incorporated into the annual management plan for eradication of invasive plants as well. All soil disturbing activities associated with decisions such as vegetation treatments also have prevention and mitigation measures put in place as an integrated approach.

The treatments of invasive plants have been conducted in sequence with pre and post vegetation treatments where soil disturbing activities have taken place. Treatments have also been reflective of the scope and scale of work conducted which also includes the timber removal, thinning, fuels reduction, and prescribed fire. These treatments, however, don't reflect efforts around natural and human-related vectors which are other sources for invasive plant establishment, occupancy, and spread. The components would have to monitored to assess if the current treatments applied are still trending the forest towards its desired condition.

REGION 6 – CFLRP INVASIVE MONITORING OVERVIEW

To assess invasive species prevalence within project areas, CFLRPs in Region 6 will use field-based monitoring to survey invasive species. Field-based monitoring plots will be installed both within and outside of treatment areas and the precent cover of different invasive species will be estimated in each plot. Data for a minimum of 100 plots should be collected (75 on treated and 25 on untreated areas).

Border Planning Area Plot Monitoring Picture Below

INVASIVE PLANT TABLE

Colville National Forest Invasive Plant List

Common Name	Latin Name	Plant Code
Yellow or orange hawkweed	Hieracium Caespitosum Hieracium Aurantiacum	HIPR HIAU
Diffuse Knapweed Spotted knapweed	Centaurea diffusa Centaurea Stoebe ssp. Micranthos	CEDI3 CESTM
Plumeless thistle, Musk thistle, Scotch thistle, Canada thistle	Carduus nutans Carduus nutans Onopordum acanthium Cirsium arvense	CANU4 CANU4 ONAC CIAR4
Dalmation toadflax	Limaria dalmatica	LIDA
Hoary Alyssum	Berteroa incana	BEIN2
Annual or common bugloss	Anchusa officinalis	ANOF
Oxeye daisy	Chrysanthemum Leucanthemum VAR Pinnatifidum	CHLE
Common Houndstongue	Cynoglossum officinale	CYOF
Absinth Wormwood	Artemisia absinthium	ARAB3
Sulfur Cinquefoil	Potentilla recta	PORE5
Common mullein	Verbascum thapsus	VETH
St. Johns wort	Hypericum Perforatum	HYPE

Monitoring Question #6: "How has the social and economic context changed, if at all?"

Describe the current social and economic context for your CFLRP landscape. For detailed guidance, training, and resources, see corresponding reporting template here. Use it to respond to the following prompts:

Counties = Okanogan, Ferry, Stevens, Spokane, Pend Oreille

Indicators	Response for Initial Year of Common Monitoring Strategy	Notes (Optional)
"Population" most recent year available (tab 1, Forest Service report)	**640000**	
"Percent of total, race & ethnicity" most recent year available (tab 11, Forest Service report)	Hispanic – 6.9 Not Hispanic – 93.1 White alone – 81.9 Black or African American – 1.5 American Indian – 1.9 Asian Alone – 1.9 Native Hawaii - .5 Some other race – 0.3 Two or more races – 5.1	
"Unemployment rate" most recent year available (tab 1, Forest Service report)	**5.1%**	

"Per capita income" most recent year available (tab 1, Forest Service report)	**$57,232**	
"Wildfire Exposure, % of Total, Homes" most recent year available (see Wildfire Risk report)	Homes Directly Exposed – 31% Homes Indirectly Exposed – 30% Homes Not Exposed – 24%	

- **Would you expect CFLRP activities to directly or indirectly impact any of these social and/or economic conditions?** Currently the unemployment rate is low due to a strong manufacturing economy. We would hope to reduce the homes directly exposed to wildfire through our treatment.

Monitoring Questions #7 & #8 covered earlier in annual report template

Monitoring Questions #9 "Did CFLRP maintain or increase the number and/or diversity of wood products that can be processed locally?"

Wood products form our NEW Vision 2020 project area have helped maintain existing wood production infrastructure, which includes:

- Boise Cascade Plywood, Kettle Falls, WA
- Boise Cascade Lumber Mill, Kettle Falls, WA and Arden, WA
- Vaagen Brothers Lumber, Colville, WA and Usk, WA
- Columbia Cedar, Kettle Falls, WA
- Avista Biomass Generating Station, Kettle Falls, WA
- Vaagen Timbers, Colville, WA

Avista and Myno are looking at adding a biochar facility in Kettle Falls, WA. Some of the feedstock for this facility would come from the NEW Vision 2020 project area.

Monitoring Questions #10 & #11 covered earlier in annual report template

Monitoring Questions #12: "How well is CFLRP encouraging an effective and meaningful collaborative approach?"

Data will be provided to 2022 cohort projects to address this question in the FY23 report. For detailed guidance, training, and resources, see corresponding reporting template here. Please upload your completed assessment summary provided by the Southwestern Ecological Restoration Institutes here and use it to respond to the prompts below:

- Reflecting on the summary provided, do you have any additional context for the results to share?
- Do you have any feedback about the assessment process?
- What have you done, or plan to do, in response to the challenges, needs, and recommendations identified in the collaboration assessment? Please provide up to 3 specific actions.
- What types of support or guidance do you need to address any of the challenges, needs, and recommendations identified in the collaboration assessment?

Data and analyses to address this question are being provided by the Southwestern Ecological Restoration Institute (SWERI) but will not be available for our CFLRP project until 2024.

(Monitoring Question #13 covered earlier in annual report template)