CFLRP Project Name (CFLR027): Western Klamath Restoration Partnership

National Forest(s): Six Rivers National Forest, Klamath National Forest

Core Partners: Karuk Tribe with work conducted by the Karuk Department of Natural Resources (KDNR), Mid Klamath Watershed Council (MKWC), Salmon River Restoration Council (SRRC), and Klamath Forest Alliance (KFA), and the Six Rivers National Forest (SRF)

1. Executive Summary

For the Western Klamath Restoration Partnership (WKRP), 2023 marked the second year in the Collaborative Forest Landscape Restoration (CFLR) program. The major themes for this year included increasing partner coordination in implementing manual and prescribed fire fuels reduction treatments, initiation of several large aquatic restoration projects, and renewal of partnership objectives and strategies. This year also marked the first year of inclusion in the Klamath River Basin (KRB) priority landscape for the Wildfire Crisis Strategy (WCS) and the signing of the Karuk Tribal Forest Protection Act (TFPA).

Ecological Accomplishments

In 2023, work focused on four fuels reduction projects which included wildland urban interface (WUI) and fuel break treatments adjacent to the out-lying communities along the Klamath and Salmon Rivers. One achievement was the collaborative effort to burn 135 acres in the Rogers Creek area, adjacent to an area of cultural importance to the Karuk Tribe. To obtain the desired goals, Karuk cultural fire practitioners took the lead in burning this unit with support of Forest Service fire personnel.

In addition to fuels work, aquatic restoration is also a primary objective of the collaborative with a focus on improving habitat for the salmonid fish species in the Klamath and Salmon Rivers. About $ 1,320,000 of the 2023 CFLR funds was invested in aquatic restoration, including fish passage, and channel and floodplain restoration projects. One project completed this year was the removal of an old fish hatchery and the restoration of the floodplain on Camp Creek. Three additional large-scale aquatic projects were started including improvements along Beaver Creek, Red Bank, and Red Cap Creek.

One challenge this year was the active fire season that occurred within and adjacent to the project area. In August, lightning ignited multiple fires which burned over 62,000 acres in the planning area by the end of October. The widespread nature of these fires, across multiple firesheds and the active role that many partners played in the wildfire suppression organization delayed work on ongoing projects.

Social Benefits

During the summer, the WKRP held a series of public meetings to renew the collaborative goals and priorities that guide the focus and actions of the partnership. Meetings were held in the different geographic communities that WKRP's planning area is situated: Happy Camp, Orleans, and Forks of Salmon to give the public an opportunity to review the updated goals and renewed strategies. A graphic was professionally produced and expert facilitation was recruited for maximizing feedback and to foster public support for what will become WKRP's updated 10-year plan.

Economic benefits

In January 2023, the Klamath River Basin (KRB) was named one of the eleven additional priority landscapes in the WCS. The WKRP collaborative area, which falls completely within this landscape received an additional $7 million to complete

fuels reduction work. In addition, the Karuk Tribe received $4.5 million through the TFPA of which approximately $ 3.5 million will be used for project planning and implementation that supports WKRP collaborative goals.

2. Funding

CFLRP and Forest Service Match Expenditures

Fund Source: CFLN and/or CFIX Funds Expended	Total Funds Expended in Fiscal Year 2023
CFLN23	$2,998,540
CFLN22	$349,998
TOTAL	**$3,348,538**

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
NFSE2723	$36,164
WFSE2723	$818,275
TOTAL	**$854,438**

*These fund sources did not match the amount of matching funds in the FMMI CFLRP expenditure report for Salary and Expenses. The official FMMI 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
CWFS	$623,279
IRHF	$7,895,000
NFHF	$151,986
NFSF	$22,198
NFSO	$125,000
NIHX	$656,529
NIVX	$1,797,683
WFSU	$15,297
TOTAL	**$ 11,124,476**

*These fund sources did not match the amount of matching funds in the FMMI CFLRP expenditure report, or they were not included in the upward reporting databases as CFLN match. The official FMMI total was $0. Per the Program Funding Guidance, federal dollars spent on non-NFS lands may be included as match if aligned with CFLRP proposal implementation.

COMMENTS: The funds listed above include the total amounts that were invested into the WKRP boundary and obligated using contracts and agreements that will be used to implement activities that meet the collaborative objectives. Most of the contracts and agreements were signed late in the fiscal year and were unavailable to be spent until the start of FY24. However, we were directed to include these amounts in the TREAT spreadsheet and have included them here as well. Also, many of the funding sources were put in place prior to having a permanent employee in the CFLR coordinator position. Therefore, match BLIs were not associated with the CFLR project in the workplan and were not listed on the expenditure report.

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
SRRC California Dept of Fish and Wildlife (CDFW) Fisheries Restoration Grant Program (FRGP)	☐ In-kind contribution ☒ Funding	$161,959	Red Bank Floodplain and side channel enhancement project, off-channel ponds, and riparian revegetation on the North Fork Salmon River	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
SRRC & MKWC USFWS Fish Passage; NFWF Coho Enhancement Fund	☐ In-kind contribution ☒ Funding	$11,848	Fish Passage improvement work	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
SRRC & MKWC USFS Siskiyou Resource Advisory Committee (RAC)	☐ In-kind contribution ☒ Funding	$22,707	Treatment of KNF and SRF priority invasive species sites	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
MKWC	☐ In-kind contribution ☒ Funding	$53,979	Fish Passage Improvement	☒ 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
SRRC and NFWF BOR Creek Mouth Enhancement Fund				
MKWC California Department Fish and Wildlife (CDFW)	☐ In-kind contribution ☒ Funding	$10,866	Stream Habitat Improvement	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
MKWC Karuk Tribe NFWF BOR Aquatic Habitat Enhancement USFWS Fish Passage	☐ In-kind contribution ☒ Funding	$143,438	Stream Habitat Improvement and Fish Passage	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
MKWC National Forest Federation (NFF)	☐ In-kind contribution ☒ Funding	$37,443	Public Lands Work Community Stewardship Plants/Fire and Fuels/Fisheries	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
MKWC California Coastal Conservancy	☐ In-kind contribution ☒ Funding	$105,852	Mussels, chinook, coho Monitoring	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:

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
USFWS Chinook Surveys Pacificorps Coho Surveys				
MKWC USFS Pacific Southwest Research Station	☐ In-kind contribution ☒ Funding	$17,901	Fire and Fuels Monitoring	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
MKWC Cal Poly University Community Recovery After Fire	☐ In-kind contribution ☒ Funding	$27,078	Monitoring - Social	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
MKWC NFWF Klamath Community Stewardship At Risk Species and Native Plant Diversity	☐ In-kind contribution ☒ Funding	$286	Plants/Seed Collection	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
MKWC SRRC Survey	☐ In-kind contribution ☒ Funding	$916	Mapping/ARC GIS	☒ National Forest System Lands

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
				☐ Other lands within CFLRP landscape:
MKWC Karuk Tribe	☐ In-kind contribution ☒ Funding	$18,186	Fish Habitat Improvement	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
MKWC CA Department of Fire and Forestry (Cal Fire)	☐ In-kind contribution ☒ Funding	$38,886	Manual Fuels Reduction	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
MKWC Cal Fire	☐ In-kind contribution ☒ Funding	$34,407	Manual, Mechanical and/or Rx burning	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:

Total In-Kind Contributions: N/A

Total Funding: $ 685,752

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	$ N/A
Revenue generated through Good Neighbor Agreements	Totals
	$ N/A

"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]	3,576		3,576
Hazardous Fuels Reduction (acres) in the Wildland Urban Interface - COMPLETED	FP-FUELS-WUI-CMPLT (reported in FACTS)[4]	2,411		2,411
Hazardous Fuels Reduction (acres) outside the Wildland Urban Interface	FP-FUELS-NON-WUI (reported in FACTS)[3]			
Hazardous Fuels Reduction (acres) outside the Wildland Urban Interface - COMPLETED	FP-FUELS-NON-WUI-CMPLT (reported in FACTS)[4]	256		256
Wildfire Risk Mitigation Outcomes - Acres treated to mitigate wildfire risk	FP-FUELS-ALL-MIT-NFS (reported in FACTS)	203		203
Prescribed Fire (acres)	Activity component of FP-FUELS-ALL (reported in FACTS)	1,482		1,482
Invasive Species Treatments (acres) - Noxious weeds and invasive plants	INVPLT-NXWD-FED-AC (reported in FACTS)[3]	392		392
Invasive Species Treatments (acres) - Noxious weeds and invasive plants - COMPLETED	INVPLT-NXWD-FED-AC-CMPLT (reported in FACTS)[4]	392		392

[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]			
Invasive Species Treatments (acres) - Terrestrial and aquatic species - COMPLETED	INVSPE-TERR-FED-AC- CMPLT (reported in FACTS)[46]			
Road Decommissioning (Unauthorized Road) (miles)	RD-DECOM-NON-SYS (Roads reporting)			
Road Decommissioning (National Forest System Road) (miles)	RD-DECOM-SYS (Roads reporting)			
Road Improvement (High Clearance) (miles)	RD-HC-IMP-MI (Roads reporting)			
Road Improvement (Passenger Car System) (miles)	RD-PC-IMP-MI (Roads reporting)			
Road Maintenance (High Clearance) (miles)	RD-HC-MAINT-MI (Roads reporting)			
Road Maintenance (Passenger Car System) (miles)	RD-PC-MAINT-MI (Roads reporting)			
Trail Improvement (miles)	TL-IMP-STD (Trails reporting)			
Trail Maintenance (miles)	TL-MAINT-STD (Trails reporting)			
Wildlife Habitat Restoration (acres)	HBT-ENH-TERR (reported in WIT)	22,154		22,154
Stream Crossings Mitigated (i.e. AOPs) (number)	STRM-CROS-MITG-STD (reported in WIT)			
Stream Habitat Enhanced (miles)	HBT-ENH-STRM (reported in WIT)	201		201
Lake Habitat Enhanced (acres)	HBT-ENH-LAK (reported in WIT)			
Water or Soil Resources Protected, Maintained, or Improved (acres)	S&W-RSRC-IMP (reported in WIT)	753		753
Stand Improvement (acres)	FOR-VEG-IMP (reported in FACTS)			
Reforestation and revegetation (acres)	FOR-VEG-EST (reported in FACTS)			
Forests treated using timber sales (acres)	TMBR-SALES-TRT-AC (reported in FACTS)	226		226
Rangeland Vegetation Improvement (acres)	RG-VEG-IMP (reported in FACTS)			

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

The original objectives of our CFLR proposal and 10-year workplan focused on accomplishments for the performance measures where treatment acres are reported above. The numbers reflect only the treatments on Forest Service lands.

[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

Additional fuels reduction work, invasive plant treatments, and aquatic and native plant restoration were completed by the partnership on private and tribal lands. However, at this time, no effort has been made to capture this information in the Forest Service databases of record, so they have not been included in the accomplishment values.

The wildlife habitat restoration accomplishment (HBT-ENH-TERR) includes 20,036 post-fire acres from the Elliot and Malone fires. These acres were identified as habitat improvements for deer and elk and migratory birds.

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

Cross-boundary Treatments

- Core partners including the Karuk Tribe, MKWC, SRRC and the Six Rivers National Forest participate in on-going coordination of project activities and planning for future projects through the year.
- The Mid Klamath Watershed Council and the Karuk Tribe continue to host the annual Klamath Prescribed Fire Training Exchange (KTREX) and Women's TREX (WTREX) burns that provide opportunities to complete training assignments needed to obtain prescribed fire qualifications while also completing important prescribed fire treatments in the community. Proposed areas for treatment during these events include tribal lands, private property and Forest Service lands.
- This past winter, the local Firesafe Council held several community meetings to discuss the priorities for future fuels reduction work through the Community Wildfire Protection Plan process for Happy Camp and Orleans/Somes Bar. This included providing maps of communities that indicated where cross-boundary treatments between private property and adjacent Forest Service lands would provide increased resilience from wildfire. This information was shared with core partners to identify the next priorities for treatment. These cross-boundary areas were mapped during the summer have been incorporated into an upcoming project that will focus on these areas as well as fuel breaks along ridges and important access routes in the Orleans area. Project acres include 1960 acres of linear fuel break features along roads, ridges, and trails and 535 acres of cross-boundary treatments adjacent to private.
- In November 2022, support for tribal partnerships resulted in a signed letter from the Region 5 Regional Forester approving the Tribal Forest Protection Act proposal submitted by the Karuk Tribe. The Karuk Tribe received $4.5 million of which approximately $ 3.5 million will be used for project planning and implementation, including additional fuels reduction, fisheries and native plant restoration work that supports the WKRP collaborative goals.
- In January 2023, the Klamath River Basin (KRB) was named one of the eleven additional priority landscapes of the Wildfire Crisis Strategy (WCS). The WKRP collaborative area falls completely within this landscape and as a result, the partnership received an additional $7 million to complete fuels reduction work. This influx of funding will allow WKRP to complete additional fuels work at an increased pace. One challenge for partners, however, has been building capacity and completing project planning to meet the scale of the funding received.
- Aquatic restoration projects are coordinated by the Mid Klamath Fisheries Subbasin Working Group which is an active partnership between the Yurok, Hoopa and Karuk Tribes, Mid Klamath Watershed Council, Salmon River Restoration Council, Scott River Restoration Council, California Department of Fish and Wildlife, National Marine Fisheries Service, U.S. Fish and Wildlife Service, and U.S. Forest Service. This working group has developed the Klamath Basin Integrated Fisheries Restoration and Monitoring plan, (https://ifrmp.net/), which provides information on restoration and monitoring need and helps to identify priority fisheries/riparian restoration projects in the Klamath Basin. A total of $2,750,913 was invested in aquatic restoration projects in 2023.

- Invasive plant treatments and native plant restoration projects are coordinated by partners through the Klamath Alliance for Regional Invasive Species Management (KARISM). Partners include federal agencies and non-profit groups in the Northwest corner of California. KARISM has identified three priority areas: prevention of post-fire invasive plant establishment, increasing the availability of local native plant materials and Sudden Oak Death monitoring and education.
- In addition to aligning this funding with other projects for landscape scale efforts, WKRP engaged in coordination and planning activities which will inform these efforts. In June, partners hosted three workshops in the three geographic areas that its planning area is situated (e.g. Happy Camp, Orleans, and Forks of Salmon). The annual workshop, took a "road show" approach, and intended to maximize public input and involvement for the collaborative's 10-year restoration plan update. An updated framework was presented, and who comprised local managers from partners, researchers, county government, nongovernmental organizations, and the local community. The framework was a refresh on what had been in place and that was built around shared values, agreements, and strategies. Participants were asked for their contributions to objectives, actions, and indicators relevant to the newly drafted strategies. These will be reflected in the new plan, estimated for completion in late 2024. In the interim, partners focus projects prioritized by the original collaborative process.

4. Restoring Fire-Adapted Landscapes and Reducing Hazardous Fuels

Narrative Overview of Treatments Completed in FY23 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?

One of the primary objectives of the partnership is community resilience through fuels reduction work and restoration of healthy fire to the landscape. Initial priorities for treatment were established using an "Overlay Assessment" (GIS spatial exercise) where different social, economic and ecological factors were reviewed by collaborative partners to develop "zones of agreement" of where the highest priorities for treatment existed across the landscape. A few examples of the factors include: 1) Creating defensible space around structures and critical infrastructure through manual and prescribed burning fuels reduction treatments; 2) Safe and reliable access and egress routes will be maintained by manual, mechanical and prescribed burning treatments (if implemented, will also provide cost effective linear features to stop wildfires and start prescribed fires); and 3) Public/Private boundary layers to create fuel breaks along the public-private boundaries to allow both federal and private landowners to have more certainty that fires, especially prescribed fires, don't inadvertently spread across property lines. From this overlay WKRP determined which areas were priority for treatment and used this to develop the initial projects for collaboration. This past year, the core team has been working on an updated version of the overlay assessment which will consider landscape changes that have taken place in the last few years and/or any changes in partnership priorities.

In 2023, hazardous fuels reduction work focused on four projects areas. The main purpose of these projects is to reduce threats from wildfires to communities along the Klamath and Salmon Rivers.

- The Somes Bar Integrated Fuels Management project (SBFIMP) focuses on four out-lying communities in the Somes Bar area and includes commercial thinning, manual fuels reduction and prescribed fire treatments. Mechanical treatments have been completed for three of the communities and has started in the Donahue flat

area. Manual fuels treatments and pile burning continue using both our partner workforce and small contracts. Partners are currently coordinating priorities for prescribed fire treatments in the upcoming year.

- The Orleans Community Fuels Reduction project includes fuels reduction around the town of Orleans. Work in 2023 included several small manual fuels reduction contracts and preparation of mechanical units for a ground-based mechanical treatment contract to start in 2024.
- Leary Creek provides fuel resilience and preparedness to out-lying communities located between Orleans and the Hoopa Reservation and provides a linear fuelbreak between these communities. In 2023, manual fuel reduction and prescribed fire units were completed using Forest Service personnel in collaboration with contractors and partner workforce.
- The Eddy Later Seral Reserve (LSR) project consists of mastication and fuels reduction treatments that will create fuelbreaks and safe egress routes adjacent to the communities of Sawyers Bar, Cecilville, and other small communities along the Salmon River. In 2023, fuel break treatments using CFLR funds were started and will be completed in 2024.
- Overall, about $355,000 of the 2023 CFLR funds and an additional $9.4 million in matching and federal funds was invested in this area and will be utilized to continue work on these and other fuels reduction projects. A total of 2,411 acres on WUI treatment and 256 acres of non-WUI treatments were accomplished in 2023.

Out year fuels project planning included two projects.

- Work continues on the Ikxariyatuuyship / Offield Mountain Project, which is an important cultural site for the Karuk Tribe and part of a Forest Plan Cultural Management Area. The landscape is 10,004 acres, 211 of which have recently been transferred to the Karuk Tribe. The Karuk Tribe, in collaboration with WKRP partners are interested in restoring traditional cultural management practices to this landscape.
- In September 2023, the Six Rivers Fire and Fuels EA NEPA document was signed. This is a programmatic document for fuels reduction and prescribed fire treatments across the Six Rivers National Forest. As mentioned above, WKRP is currently working on a project that would create fuel breaks along important access routes and also on FS lands adjacent to private property that are suited to cross-boundary treatments.

One of the main lessons learned in the past year is that good communication regarding implementation status will be necessary in order to increase pace and scale of fuels reduction treatments. Improved communication will allow partners to identify what areas are ready for the next stage of treatment and where potential road blocks may be. With this in mind, partners have been developing a GIS implementation application to share the status of project work, where it can be easily accessed by other partners.

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

In 2023, Twenty-three wildfires interacted with a fuel treatment area in the WKRP boundary for a total of 55,539 acres. Of these, 16 fires were less than three acres in size and seven were larger fires between 96 and 17,984 acres. Most of the treatment interactions were from previous wildfires. As of 12/14, FTEM reports nine fires had not been completed – one from the Klamath and eight from the Six Rivers. A collaborative project between the Region 5 office and the Six Rivers to create a geographical survey application delayed starting the Six Rivers reports. The below information reflects the information that was available at the time of this writing.

- <u>FROM FTEM (can be copied/summarized):</u> Did the wildfire behavior change after the fire entered the treatment?

In most cases the wildfire behavior of smaller fires did NOT change when the fire entered the treatment – only 4 small fires indicated a change in fire behavior. For one large fire, the wildfire behavior did change as a result of treatments. For the Elliot fire, results were mixed where some treatments changed the behavior of the wildfire where others did not.

- FROM FTEM (can be copied/summarized): Did the treatment contribute to the control and/or management of the wildfire?

In almost all fires reported, the treatment contributed to control of the fire. Only two fires reported that the treatment did not contribute to management.

- FROM FTEM (can be copied/summarized): Was the treatment strategically located to affect the behavior of a future wildfire?

For the small fires, most treatments were not strategically located – only 5 indicated that previous treatments were strategically located. Both the Malone and Elliot fires reported that some of the previous treatments were strategically located.

- 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?

Partners often collaborate with community members and each other in the prioritization and planning of fuel treatments. Partners regularly coordinate on prescribed fire treatments and many of the pile burning treatments are completed collaboratively. As we develop more ground that is ready for cross-boundary burning, we expect this coordination to increase.

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

Community resilience and fire preparedness has been the primary focus of most fuel treatments. This includes reducing fuels directly adjacent to private property and creating fuel breaks that will potentially allow greater control of wildfire boundaries. A second priority is treatment of culturally important plants and restoration of cultural fire. These include areas with basket materials or traditional food crops where utilizing fire will increase production and reduce insect damage or other areas with cultural significance where fire may play a role. Finally, partners are concerned with restoring the natural processes of fire to the landscape, where instead of stopping a fire, letting it burn to help achieve resource benefit. Fuels treatments are planned to maximize decision-making space during wildfire events.

- How are planned treatments affected by the fire over the rest of the project? Was there any resource benefit from the fire that was accomplished within the CFLRP footprint or is complementary to planned activities?

In 2023, fires did not in interact with any of the areas with planned treatments so there are no changes to our project objectives for the next few years. In general, 2023 fires in the Western Klamath burned at low to moderate severity with only small pockets of high severity resulting in improved resource conditions that will benefit our area and complement our planned treatments.

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

For some of this year's wildfires, incident management teams worked with forest leadership to manage fires in ways that would minimize long-term resource damage and where possible, utilize the existing wildfire to reduce fuels while still working towards full suppression. This resulted in low to moderate intensity fire over most of the fire footprints. This process of working with the existing fire may be beneficial in future fires, if conditions allow.

FY23 Wildfire/Hazardous Fuels Expenditures

Category	$
FY23 Wildfire Preparedness*	$ 22,646,187
FY23 Wildfire Suppression**	$ 198,914,795
FY23 Hazardous Fuels Treatment Costs (CFLN, CFIX)	$ 354,562
FY23 Hazardous Fuels Treatment Costs (other BLIs)	$ 8,024,634

* 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.

Note: Wildfire suppression costs include the cost to date for the two fire complexes within the WKRP boundary. Some of the costs are for fires adjacent to the program boundary, but it was not possible to separate out those costs.

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")

Fuels treatments may contribute to future reductions, but currently fire suppression costs are still high in our area.

5. Additional Ecological Goals

Narrative Overview of <u>Treatments Completed in FY23</u> 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.

Aquatic Restoration:

- In 2023, about $ 1,320,000 of the 2023 CFLR funds and $1,430,913 partner match and other federal funds was invested in aquatic restoration, including fish passage, channel and floodplain restoration projects. Information from the Klamath Basin Integrated Fisheries Restoration and Monitoring plan and discussions in the Subbasin Working Group were used to prioritize treatments.
- The fish passage/creek mouth enhancement implementation treatments are annual treatments to address flow barriers. These treatments are critical to maintain cold-water habitat during summer months. In 2023, SRRC and MKWC crews visited and assessed tributaries and completed fish passage improvement work along 43 streams which made 201 miles of streams accessible to juvenile and adult salmonids.
- The Camp Creek project is a multi-phase restoration project to reconnect the historic floodplain and enhance critical over-wintering habitat for salmon and other aquatic species. Phase one, which was completed in September 2023, removed the discarded remnants of a fish-rearing facility and a large berm that separated the current stream channel from the flood plain. This project was a joint effort between the Karuk Tribe, MKWC and the Six Rivers National Forest.
- The Red Bank habitat enhancement project is a SRRC restoration project to restore the diverse channel structure and fish habitat along this tributary to the Salmon River. In 2023, an excavator was used to create slow-water habitat for juvenile salmonids by constructing backwater eddies and engineered wood structures along the existing channel. This project was led by SRRC.
- The Red Cap Creek Schnabble Digging project is an eight-phase project to restore the flood plain and fish habitat along Red Cap Creek. Phase one of this project was scheduled to begin in Summer of 2023 but was postponed due to Highway 96 road construction until mid-July 2024.
- The Beaver Creek Aquatic Restoration Project is a collaboration between MKWC, the Karuk Tribe and the Klamath National Forest, and Caltrans to restore floodplain connectivity, off-channel rearing and wetland habitat, and provide instream spawning and rearing habitat with large wood debris to ¾ mile of lower Beaver Creek. In 2023, four off-channel ponds and seven instream wood structures were constructed. A helicopter wood loading component of this project will be implemented in 2024.

Native Plant Restoration and Invasive Plant Removal:

- In 2023, $251,367 of the CFLR funds and an additional $380,621 in matching funds were invested in the WKRP area to support invasive plant treatments and native plant restoration work. Priorities are determined by the KARISM group and discussions between the Forest Service and other core partners.
- In 2023, 392 acres of invasive weed treatments were completed by partners including treatment of 18 species across 254 sites. Weed sites that are state ranked or new species to the area, represent the leading edge, or are remote satellite populations that are prioritized for treatment.
- Partners at KDNR, SRRC, and MKWC continue to collect native grass seed that will be used to increase the availability of local seed. This year, partners collected 5 species of grass seed for a total of 10.2 lbs. In 2024, seed collected during the past two years and $90,000 of CFLR funds will be invested in a seed growout contract that will fund production of eight native grass species to be used in future restoration projects.

6. Socioeconomic Goals

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

Table: Western Klamath CFLRP socioeconomic activities/accomplishments for FY-23

What	How
CWPP(s)	• Happy Camp CWPP • Orleans-Somes Bar CWPP • For more on these see below
Outreach opportunities:	• Presentation by Jessie Thoreson, “Ecocultural revitalization of black oak groves”, May 2023 • Dissertation presentation by Bruno Seraphin, “Fires Beyond Crisis…” July 2023 • Pikyav Field Institute and WKRP joint lecture series, December 2022
Job training:	The 10th annual Klamath TREX (KTREX) events took place in FY23. Through KTREX, WKRP has demonstrated the ability to effectively get fire on the ground in highly challenging conditions and which works on a myriad of social, cultural, political, ecological, and economic goals pertaining to increasing wildfire resiliency. Each year, KTREX provides quality training assignments to local, non-local, tribal, state and federal fire practitioners, which follow federal NWCG (national wildfire coordinating group) standards. This year’s number of participants was approximately #90, a typical average, while also being one of the largest TREX events consistently across the country.
Public input and involvement:	Since 2013, the beginning of the WKRP collaborative, partners consisting of federal agencies, Tribes, and environmental, industry, and local community groups began engaging in the Open Standards Process for Conservation. By design, and from this point, public input and involvement is a fundamental aspect of the way the group makes decisions. In FY-23, three simultaneous planning efforts were engaged in that included the Happy Camp **Community Wildfire Protection Plan** (CWPP); Orleans-Somes Bar CWPP; and the WKRP 10-year **Restoration Plan update**. So far there has been a myriad of neighborhood meetings; one large community meeting; multiple partner meetings, i.e. agency and organization members; and three public workshops. These all served to gather input, feedback; promote buy-in, co-ownership; provide education; and overall engage inclusion.

Cultural heritage, subsistence uses and values	Collaborative planning of each project, through archaeological/cultural resource crews, identify Traditional Ecological Knowledge to be incorporated into project planning, implementation, and research and monitoring. This includes identification of culturally relevant 'Focal Species' that each project is designed to support through habitat improvement and monitoring. For example: salmonids, salamander, elk, black oak, tanoak, other legacy trees, huckleberry, acorns, willow, humans, manzanita, western pond turtle, and more.

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: _82_%

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

Description	Project Percent
Equipment intensive work	20%
Labor-intensive work	45%
Material-intensive work	4%
Technical services	23%
Professional services	3%
Contracted Monitoring	6%
TOTALS:	100%

Modelled Jobs Supported/Maintained (CFLRP and matching funding):

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	0	0	5,619	7,024
Forest and watershed restoration component	93	139	5,658,090	8,182,577
Mill processing component	0	0	0	0
Implementation and monitoring	7	9	419,710	498,722
Other Project Activities	7	10	360,325	509,196
TOTALS:	**108**	**157**	**6,443,744**	**9,197,519**

- **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**?

[7] Addresses Core Monitoring Question #7

Comments: As mentioned previously, there were a lot of funds that were obligated in 2023 from the Klamath Basin priority landscape and TFPA that will be applied toward future work in the partnership area. While, there has been increase employment opportunities in the local area, both at partner organizations and through contracts, the total jobs represented in the table appears to be high.

Also, in the initial analysis of counties to include in the local area, three California counties were identified – Humboldt, Siskiyou and Trinity counties. Trinity county was originally included because there was the expectation that future timber volume may be sent to mills. However, currently there are no mills or other economic resources originating from Trinity County. However, most of the recent contractors travel to our area from Jackson County, Oregon. The money from are projects flowing to this area is higher than originally anticipated and it may be that in future years we will include Jackson County in our local area.

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).
Table. Characteristics of local entities capturing work (CMS Q8, Indicator 3)

Recipients	**Company Name**	**Business size**	**Project Name**	**Funder: CFLRP or CFLRP Match**	**How local? (1st tier - hyper local)**
Minority Owned Business	Three Stripes Contracting	40 person	OCFR (Orleans Community Fuels Reduction)	CFLRP Match Source	Second tier
Corporate Entity	Summit Forestry	~200 person	Somes Bar Integrated Fire Management Project (SBIFMP)	Funded by CFLRP	Second tier
For Profit Organization	Lomakatsi Restoration Project	~52 person	SBIFMP, OCFR	Funded by CFLRP and CFLRP Match Source	Second tier
Small Disadvantaged Business	ABC Logging	~2 person	SBIFMP	CFLRP Match Source	First tier
Small Disadvantaged Business	TT Construction	~1 to 3 person	Camp Creek Floodplain Restoration	Funded by CFLRP	First tier
Corporate Entity	North Rivers Construction	~5 person	Red Bank and Mathews Creek	Funded by CFLRP	Second tier
Corporate Entity	Mike Love and Associates	4 person	Red Bank	Funded by CFLRP	Second tier

[8] Addresses Core Monitoring Question #8

Small Disadvantaged Business	Jim Johnson Logging	~ 1 to 2 person	Red Bank	Funded by CFLRP	Second tier
Corporate Entity	Pacific Watershed Associates	26 person	Red Bank	Funded by CFLRP	Second tier
Corporate Entity	Timber Products	1,200	Leary Creek	CFLRP Match Source	Second tier
Small Disadvantaged Business	O C Forestry	~1 to 20 person	Leary Creek	CFLRP Match Source	Second tier
Small Woman-owned disadvantaged Business	GONZALEZ FORESTRY INC	~1 to 20 person	Leary Creek	CFLRP Match Source	Second tier
Small Disadvantaged Business	SPROUT FORESTRY INC	~1 to 20 person	Leary Creek	CFLRP Match Source	Second Tier

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	Not available
Volume of timber sold TMBR-VOL-SLD	CCF	43
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	none

- Reviewing the data above, do you have additional data sources or description to add in terms of wood product utilization (for example, work on non-National Forest System lands not included in the table)?

The timber and biomass numbers above do not reflect the total timber volume and biomass removed in the Western Klamath CFLR boundary. Additional commercial sale and hazard tree removal work occurred but did not meet the WKRP collaborative objectives, so is excluded.

[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 or last annual report (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.

No changes to report here

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.
The monitoring team for the Common Monitoring Strategy and beyond, includes members of the Karuk Tribe Department Natural Resources (KDNR), Mid Klamath Watershed Council, Klamath Forest Alliance, Salmon River Restoration Council, U.S. Forest Service, local K-12 grade students, Cal Poly Humboldt and other university students and researchers, USFS Region 5 Remote Sensing Laboratory, USFS Pacific Southwest Research Station, as well as community "community science" volunteers.

WKRP partners collaboratively, prior to becoming a cohort member of CFLRP, developed a multiparty monitoring (MPM) strategy to guide the group's projects. The plan outlines the goals of the group and questions to be answered. The WKRP Multi-Party Monitoring (MPM) team working on this joint effort, is part of a larger workgroup, the WKRP Research and Monitoring Workgroup. Through this structure, partners and specific individuals have been assigned to questions of the Common Monitoring Strategy (CMS) of CFLRP. We are using the existing MPM strategy as a framework for both partner-based monitoring priorities as well as for requirements of CMS. Also, we are assessing how these priorities may complement each other and serve both efforts. The pre-existing MPM plan was updated in 2023 with a timeline to revisit in early 2024, for implementation of the current and following years.

Other changes to our MPM process in the last year include engagement of all partners, including the Six Rivers National Forest. Up to this point in time, partners have mostly dealt with lacking funding support for monitoring, and certainly lacking opportunities to jointly monitor with Forest Service partners. For the first time, we will implement a monitoring program that all partners are funded for. Currently, we are in our second year as a CFLRP, and as such, we don't yet have enough data to reflect on we are in our monitoring program and its coordination.

*In 2015, KDNR developed the Pikyav ("to fix it") Field Institute. Integration of intergenerational learning into everything we do is a key part of our long-term success. Information captured by the Archaeological/ Cultural Resource crews help to identify Traditional Ecological Knowledge to be incorporated into project planning, implementation, and research and monitoring.

10. Conclusion

[10] Addresses Core Monitoring Question #11

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?

In our initial workplan, we did not include work on trails or roads as part of our initial project proposal. Trails were not included in the final proposal because there was no advocate for trails engaged in the planning process and roads were not included because the priorities for the partnership focused on the treatments that most benefited natural resources. In recent meetings, however, the topic of roads was brought up as a need to be able to complete the desired fuels treatments and trails work was brought up for consideration as well. We would like to continue the discussion on possibly adding these to our workplan.

Optional Prompts

FY 2023 Additional Accomplishment Narrative and/or Lessons Learned Highlights

Media Recap

- https://issuu.com/midklamathwc/docs/2022_wkrp_ar_final_3_ (p.7)

Visuals

Photos and additional information regarding our project has be uploaded here

Signatures

Recommended by (Project Coordinator(s)): /s/ Erin Rentz
Approved by (Forest Supervisor(s)): /s/ Ted O. McArthur
Draft reviewed by (collaborative representative): */s/ Analisa Tripp, Collaborative Stewardship Program Manager, Karuk Tribe Department of Natural Resources*

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)	58,301 (5 %)	47,591 (4 %)	459,819 (38 %)	167,483 (14 %)	42,258 (4 %)	114,465 (10 %)	307,795 (26%)

- **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.** If the data above does not accurately reflect fire and fuel hazard on your landscape please note and provide context. While generally smaller flame lengths are desirable, this isn't the case in all ecosystems – please note if this applies.

The above table represents the baseline data for the Western Klamath. Currently, over 50% of the area is modeled for flame lengths greater the 4 feet. In general, for this area less than 4 ft flame lengths are desired to obtain the frequent low to moderate intensity fire that occurred historically. While several vegetation types within the landscape do require infrequent, high intensity fire, this represents only a small amount (2.5%) of the total area.

Table 2. Crown fire activity from IFTDSS - IFTDSS Auto-97th crown fire activity output by watershed

Watershed Name	Unburnable	Surface Fire	Passive Crown Fire	Active Crown Fire	Crown Fire (combined)
Cinnabar Springs, California	1686.6 (5.0%)	20881.7 (62.3%)	9367.0 (27.9%)	1586.6 (4.7%)	10953.6 (32.7%)
Browntown, Oregon	11357.5 (5.1%)	170719.5 (76.6%)	30281.5 (13.6%)	10560.2 (4.7%)	40841.7 (18.3%)
Lawyers Bar, California	3175.4 (4.0%)	47705.2 (59.4%)	24251.0 (30.2%)	5228.3 (6.5%)	29479.3 (36.7%)
Camp Klamath, California	1196.3 (3.0%)	6441.9 (16.2%)	19864.3 (49.9%)	12324.7 (30.9%)	32189.0 (80.8%)
Cottage Grove, California	11152.2 (4.0%)	187370.8 (67.9%)	60555.2 (21.9%)	16870.0 (6.1%)	77425.1 (28.1%)
Etna, California	700.1 (13.1%)	4145.4 (77.7%)	413.9 (7.8%)	72.9 (1.4%)	486.8 (9.1%)
Dyer Place, California	9988.0 (4.1%)	79612.2 (32.5%)	94886.5 (38.7%)	60626.3 (24.7%)	155512.8 (63.4%)
Bestville, California	10959.4 (5.3%)	116648.4 (56.5%)	61685.6 (29.9%)	17179.5 (8.3%)	78865.1 (38.2%)
Denny, California	1510.1 (4.2%)	32451.4 (89.7%)	1482.5 (4.1%)	723.9 (2.0%)	2206.4 (6.1%)
Carrville, California	6576.4 (12.6%)	42616.6 (81.9%)	2232.6 (4.3%)	624.9 (1.2%)	2857.5 (5.5%)

- **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.** If the data above does not accurately reflect fire and fuel hazard on your landscape please note and provide context.
- **Does your CFLRP project have additional hazardous-fuels related monitoring results to summarize and interpret?** If so, please provide that here.
- **Based on the information in this section, (and any other relevant monitoring information and discussion), what (if any) actions or changes are you considering?**

The above table represents the baseline data for the Western Klamath. Currently, there are 2 firesheds that are modelled with over 50% crown fire – Camp Klamath, California and Dyer Place, California. Current project work falls in two of the firesheds: Cinnabar Springs, California and Browntown, Oregon.

In addition to the above monitoring, a GIS survey application has been created and shared with partners that will allow collaborators to collect hazardous fuels conditions in a tool that can be used to track changes over multiple projects and can be used to summarize results as we complete treatments. A summary of this tool has been included in our Annual Report Uploads.

Monitoring Question #2: "What is the effect of the treatments on moving the forest landscape toward a more sustainable condition?"

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

Regions have standardized on one of the four following metrics to address Indicator 1 for ecological departure. For your region's chosen metric, please insert the matching table that corresponds with your indicator from the reporting template (abbreviated examples below).

Table 2. Missed Fire Cycle

Fire Regime Group	**Fire Regime *I*** (*Frequent*: 0-35 years, Low Severity)	**Fire Regime *II*** (*Frequent*: (0-35 years, Stand Replacement Severity)	**Fire Regime *III*** (35-100+ years, Mixed Severity)	**Fire Regime *IV*** (35-100+ years, Stand Replacement Severity)	**Fire Regime *V*** (200+ years, Stand Replacement Severity)
WKRP landscape by Fire Regime Group	998, 050 ac. (83.3%)	81,314 ac. (6.8%)	59,957 ac. (5.0%)	29,405 ac. (2.5%)	none
Fire Return Interval (FRI)	12 years	24 years	31 years	84 years	
# of Missed Fire Cycles *Area-weighted average*	**4**	**2**	**2**	**-1**	

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

The above table represents the baseline data for WKRP CFLR footprint. The Western Klamath landscape is highly departed from historic ecological conditions, especially in vegetation types where fire frequency plays a major role in shaping forest structure. Different vegetation types are adapted to different fire frequency and severity that help to maintain those specific plant communities. In this table, Fire Regime Groups are used to group vegetation types that have a similar Fire Regime. In the Western Klamath landscape, most of the vegetation (83%) is adapted to frequent, low severity fire as represented by Fire Regime Group 1. Historically, frequent low- to moderate-severity fire was the primary fire regime because of frequent lightning and indigenous burning. and historically, fire occurred on average every twelve years. Presently, Fire Regime Group 1 vegetation types have missed, on average, 4 fire cycles and are at risk of high severity fire, due to the density of vegetation. In contrast, Fire Regime Class IV historically experienced infrequent fire where fires were typically high severity stand replacing fires. In recent years, these areas have experienced more frequent fire cycles.

Note: 28,978 Acres (2.4%) of the total WKRP boundary did not have a Fire Regime class designated.

Monitoring Questions #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
Under-story foraging habitat for deer and elk	Project-Specific	Percent Canopy Cover	10-20%	60%				
Riparian Improvement	Project-Specific	Length of adjacent stream (Acres)	0-100	0.3				
Salmonid Suitable Habitat (Spawning and Rearing)	Project-Specific	Aquatic Connectivity Improved (Miles of Stream)	0-500	0.17				

*Common Monitoring Strategy (CMS)

If reporting on indicator 3 (wildlife populations and/or diversity indicators), fill in this table:

Wildlife Species Name(s)	Indicator and Unit of Measure	Target Range	Value in Initial Year of CMS	Acres of Habitat Treated to Improve this Indicator
Northern Spotted Owl	Detections	TBD	TBD	
Elk	Sightings on Game Cams in treated habitat	TBD	TBD	

For the table or table(s) 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.
- **Does your CFLRP project have additional wildlife-related monitoring results to summarize and interpret?** If so, please provide that here.

This represents the baseline data for WKRP. Our species of interest are the TES wildlife species in the Western Klamath project boundary, which includes Northern Spotted Owl and Pacific Marten. For these species we are interested in increasing or maintaining habitat, so measures will reflect % of change of habitat within the project. In addition, we are interested in improving habitat for deer and elk so we are working to identify measures that will be used to inform treatment prescriptions for habitat restoration using TEK and adaptive management. For our aquatic projects, we will be measuring riparian habitat adjacent to streams and also available stream reaches to determine habitat improvements for juvenile and adult salmonids. The above measures represent the very initial phases of the monitoring protocol and further discussion and baseline data is needed to refine these measures.

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

Note: Based on discussions with the Six Rivers Watershed program manager, the original Watershed Condition Framework was completed in 2011 and work on the first high priority watershed, Bluff Creek, was completed in 2016 (or at least for the work that could be completed). Since that time, no new watershed has been selected for work. In addition, conditions in many watersheds have changed since the original assessment (ex. Watersheds impacted by high severity fire). So, no watershed improvements have been recorded in recent years. Originally, WKRP partners discussed identifying watersheds important to the collaborative and answering this question outside the framework of the WCF. However, the Six Rivers watershed program manager said the plan is to select new watersheds in January-February 2024. Therefore, baseline data for this question will be completed at that time.

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	Affected by Treatment, Disturbance Events, or Both?	Date Before Treatment and/or Disturbance Event	Watershed Condition Score in Initial Year of CMS

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		
2	Water Quantity		
3	Aquatic Habitat		

Aquatic Biological (Weighted 30%)

4	Aquatic Biota		
5	Riparian/Wetland Vegetation		

Terrestrial Physical (Weighted 30%)

6	Roads & Trails		
7	Soils		

Terrestrial Biological (Weighted 10%)

8	Fire Regime or Wildfire		
9	Forest Cover		
10	Rangeland Vegetation		
11	Terrestrial Invasive Species		
12	Forest Health		

- **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.

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

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

Treatment data for priority invasive species:

Common Name	Treatment Action	Acres Treated[1]	Acres Monitored	Avg. "Percent Efficacy"	Acres Restored[2]	Response of Desirable Species[3]
Canada thistle	Hand work	0.1				
cheatgrass	Hand work	0.1				
diffuse knapweed	Hand work	0.1	0.1	95		
Dyer's woad	Hand work	110.8	89.7	85		
French Broom	Hand work	1.0				
Himalayan blackberry	Hand work	0.7	0.4	85		
Italian plumeless thistle	Hand work	176.4	176.1	95		
Leafy spurge	Hand work	0.1				
Meadow knapweed	Hand work	4.9	4.9	65		
Mullein	Hand work	1.3	1.5	95		
musk thistle	Hand work	0.1	0.1	95		

oblong spurge	Hand work	10.1				
Puncturevine	Handwork	10.7	9.7	85		
Scotch broom	Hand work	9.5	9.3	75		
spotted knapweed	Hand work	36.8	36.6	90		
star-thistle	Hand work	5.3	3.3	85		
sulphur cinquefoil	Hand work	24.1	24.11	80		
Tree of heaven	Hand work	0.1	0.1	85		
	Totals/Avgs	**392.2**		85.7	N/A	

[1] "Treated" is defined as prevented, controlled or eradicated.

[2] Agency performance accomplishment code INVPLT-INVSPE-REST-FED-AC, which is calculated in FACTS.

[3] "Desirable Species" includes everything that is not an undesirable species or bare ground. If not monitored, write N/A.

Please insert table 2 from the reporting template if you are using field plots.

Note: Future plots are planned to be placed in treatment areas to monitor the response of desired species and determine the effectiveness of new treatment methods. Did not locate the performance accomplishment code INVPLT-INVSPE-REST-FED-AC, but to date, there are no populations that fall under this category.

The following questions apply across the topics addressed across Questions 1-5:

- Are there accomplishments towards long-term goals which may not be reflected in short-term monitoring? Are there short-term treatments that work towards long-term goals which may be reflected adversely in short-term monitoring? Briefly summarize short- & long-term tradeoffs of your landscape treatments and goals.

Short-term monitoring is always a risk in determining the impacts of restoration on the landscape. Fire return intervals and watershed restoration are two examples where work on the ground is significant to improvements, but may not be well represented by shifts in the measure indicators.

Monitoring Questions #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:

Indicators	Response for Initial Year of Common Monitoring Strategy (based off three counties (Sisk, Hum, Tr) like TREAT is)	**(Optional) C***ommunity-specific information for:* "Karuk Tribe Reservation and off-Reservation Trust Land" (2019 - Headwaters)
"Population" most recent year available (tab 1, Forest Service report)	196,488	***491**

"Percent of total, race & ethnicity" most recent year available (tab 11, Forest Service report)	White alone – 78% Black/African American - 1.3% American Indian - 4% Hispanic ethnicity - 12.2% Non-Hispanic Ethnicity - 87.8%	White alone 11.2% Black/African American - 0.6% American Indian - 62.7% Hispanic ethnicity - 0% Non-Hispanic (& 2 or more races): 25.4%
"Unemployment rate" most recent year available (tab 1, Forest Service report)	6.7%	Unavailable
"Per capita income" most recent year available (tab 1, Forest Service report)	$56,121	$17,492
"Wildfire Exposure, % of Total, Homes" most recent year available (see Wildfire Risk report)	Homes Directly Exposed - 48% Homes Indirectly Exposed - 47% Homes Not Exposed - 5%	Homes Directly Exposed - 77% Homes Indirectly Exposed -22% Homes Not Exposed - 1%
Percent of total individuals and families in poverty, most recent year available (tab 9, Forest Service report)	10.9%	20.7%
Potentially Vulnerable Households, % total most recent year available, (tab 11, Populations at Risk)	People > 65 years & living alone - 14.4% Single female households - 10.4% Households with no car - 6.5%	People > 65 years & living alone - 14.5% Single female households - 34.6% Households with no car - 14.5%

Narrative description:

For more accuracy and relevance of socioeconomic conditions we have added the "optional" area of the "Karuk Tribe Reservation and off-Reservation Trust Land", in addition to the three counties that TREAT takes into account for the area's socioeconomic reported data. The WKRP plan area itself nearly completely aligns with this "optional" area, and which also nearly completely aligns with the project boundary outlined for the Western Klamath CFLRP. While neither of these completely align, the "Karuk Tribe Reservation and off-Reservation Trust Land", from Headwaters Economics, may enable more opportunities to capture data from impacts that CFLRP activities are having locally. I should note the population number that Headwaters Economics lists for this area, ***491**, is likely quite inaccurate. Based on my direct knowledge as well as reference to the 2020 federal census, 679 people are listed to live in the town of Happy Camp, CA; which is only one of three townships situated here. The three counties considered in TREAT cover an expansive area and there is no real feasible way to capture impacts of the CFLRP's activities in a comparison with these that I can see.

Regarding what indicators may be directly and /or indirectly (and measurably) impacted by CFLRP activities in the community of the "Karuk Tribe Reservation and off-Reservation Trust Land", population may be one. However, it's questionable if this could be accurately reflected in Headwaters Economics (HE). Generally, direct impacts may be seen by opportunities the CFLRP is providing to partner capacity and workforces. Indirectly, CFLRP is leveraging other, existing resources and having an impact on that side of things. If "unemployment" was an indicator provided by HE for the community, perhaps it could be reflected either directly and/or indirectly, but currently this data isn't provided. I don't believe CFLRP would have any ability to impact any other indicators significantly or even insignificantly.

(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?"

- Data will be provided to 2022 cohort projects to address this question in the FY23 report. If your CFLRP project has data available about the current timber harvest by county and/or product, the number of active processing facilities in the area, or other data about forest products infrastructure please provide here.

CMS Q9 Template Instructions:

- Working with Forest Service contacts, the University of Montana Bureau of Business and Economic Research (BBER) will provide the following data for 7 of the CFLRP projects in covered states in FY23 (Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming). NOTE: this data will not be available by 12/15/2023 and CFLRP projects are not required to address this question by that time. Once the analysis is available from BBER, projects will be notified to proceed.

(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:

Additional context for the results of the survey: one major factor pointed out by the group was the lack of Forest Service personnel response to the survey (e.g. 1/28). A discussion ensued about how that affected/skewed the survey, what the reasons may have been for it, and what possible solutions may exist to remedy it. There are two National Forest System lands that the WKRP plan area straddles. There is a functioning collaborative relationship with one Forest while the other isn't well-functioning despite concerted efforts by WKRP managers to foster this. Questions were raised about whether there was opportunity through the SWERI survey to get a better understanding of the reasons for the apprehension by the one Forest in spite of the CFLRP opportunity for getting good work done on the ground.

Feedback about the assessment process include that WKRP leadership communicate directly with District Rangers and other supervisory staff to task line officers to complete the survey. This was reasoned to likely be a contributor to lacking USFS responses (#1).

Two additional recommendations for specific actions to the challenges (or needs) described, in addition to #1 above, include: 2) working with SWERI staff (example of support need) to determine if conducting two different surveys is a better method to capture the vast differences taking place in the collaborative's relationships with the two Forests; and 3) pertinent to the appended questions and the generated graphic which did not reflect the: "Don't know, not enough

information" selection. The preference to have this represented was expressed.

Other types of support or guidance to address challenges may involve exploring possibilities to problem solve around the apprehension of a Forest to collaborate fully with WKRP around fire- and forestry-specific restoration work in the jurisdiction, where a significant portion of the WKRP plan area is situated, thus reducing the full extent of restoration work that could be accomplished collaboratively. For example, this may involve; 1) strong regional or national leadership intent for Forest leadership to collaborate to increase consistency through staff turnover; 2) creating incentives for employees to remain on the same landscape to retain capacity for adaptive management; 3) investment of USFS funding in USFS housing; and 4) investment in forest-wide NEPA to allow for more innovation to meet emergent needs.

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