CFLRP Project Name (CFLR#): North Yuba Forest Partnership (CFLR029)

National Forest(s): Tahoe National Forest

1. Executive Summary

The North Yuba Forest Partnership's Collaborative Forest Landscape Restoration Program (CFLRP), now an integral part of the North Yuba Priority Landscape, has achieved a significant milestone with the completion of the Record of Decision (ROD) for the 272,680-acre North Yuba Forest Resilience Project (NYLRP). The ROD was officially signed on July 12, 2023. This project stands as the most extensive forest health initiative within the US Forest Service's Region 5. It distinguishes itself by leveraging novel financing strategies, employing a partner-contracted interdisciplinary team to facilitate and produce National Environmental Policy Act (NEPA) documentation, and using cutting-edge risk modeling to effectively prioritize sub-projects.

The NYLRP aims to restore forest health and reduce wildfire risk across 210,000 acres in the North Yuba River watershed through landscape-level thinning, prescribed fire, and targeted fuels reduction, with a focus on protecting communities and enhancing habitat resilience. Notable aspects include amending the Tahoe National Forest Plan to allow limited removal of some larger trees in certain areas to promote mature pines and heterogeneity, as well as to enable treatments in California Spotted Owl and Northern Goshawk habitats in order to increase habitat sustainability over the long term. The project uses advanced data analysis and science-based collaboration to strategically prioritize and sequence treatments. As a starting point, an initial 10% of the landscape will be covered under the first decision.

Specifically, the decision authorizes approximately 27,000 acres of vegetation and fuels management treatments in the Galloway and Rattlesnake Skinner areas, including the use of prescribed fire, thinning, and creation of small forest openings. To allow for more effective treatments, project-specific amendments to the Tahoe National Forest Plan are also adopted. Across the broader North Yuba Landscape, the decision approves treatments to control non-native invasive plants as well as soil stabilization and erosion control activities on disturbed hydraulic mining sites.

These approved treatments represent an initial stage of actions, with additional areas of the Landscape to be considered for approval in subsequent Records of Decision. Before making decisions for other areas, the Forest Service will conduct required surveys and engage in public review. The staged approach provides flexibility to adjust treatments based on field conditions and monitoring while still meeting landscape-scale goals. Overall, implementation of the approved actions will initiate progress toward restoring forest health, reducing wildfire hazards, and protecting communities in the North Yuba watershed.

FY23 marked the first year of CFLRP implementation within the North Yuba Priority Landscape. Significant strides were made with over 16,000 acres of treatment successfully accomplished in the Wildland-Urban Interface (WUI), which is crucial for community protection from wildfire risks. Some of the major implementation achievements for FY23 include projects such as the Trapper SFEP, Alaska Peak timber sale, Camp Pendola Prescribed Fire, and campground hazard tree removal. Each of these achievements represent meaningful steps towards creating a more resilient forest ecosystem.

In addition to these fuels reduction projects, meadow and aspen restoration took place within the Yuba Aspen Meadow Restoration project, with a total of 239 acres restored in FY23. Efforts to combat invasive species were also part of this year’s implementation milestones, with 110 acres of invasive species treated.

Alongside these targeted on-the-ground actions, the partnership has established a comprehensive CFLRP Monitoring Plan aimed at closing the adaptive management loop. This plan is tailored to the specific conditions of the North Yuba landscape. For each of the thirteen Common Core Monitoring Questions, methods were established, and an adaptive management plan was crafted. Further, the partnership collaboratively identified three of the thirteen monitoring

questions as high-priority. These three monitoring questions focus on (1) reducing fuel hazards, (2) steering forest landscapes towards long-term sustainability, and (3) understanding the complex effects of restoration on the habitats of at-risk species, with a particular focus on the California Spotted Owl. For these priority questions, research projects were initiated prior to the CFLR, and the partnership was interested in pursuing these questions regardless of their place in the monitoring plan. This prioritization of monitoring efforts ensures a thorough, management-driven analysis of treatment impacts, spanning pre- and post-intervention stages. Additionally, it provides a flexible approach to management, continuously refining trigger points through active collaboration among all partners.

The monitoring plan anchors its adaptive management template in historical resilience, drawing from extensive Historic Range of Variability (HRV) studies to align post-treatment conditions with the natural fire regimes and structural complexity characteristic of a pre-1850s Sierra Nevada landscape. Key to this strategy is the precise establishment of basal area targets, especially within California Spotted Owl Protected Activity Centers (PACs), to foster habitats that balance ecological needs and resilience against disturbances. Our approach, detailed in an accompanying Monitoring Plan, focuses on gathering data that informs adaptive management practices, ensuring that subsequent Records of Decision are shaped by empirical evidence and staged decision-making principles. This structured approach to monitoring will enable the partnership to assess progress, learn from outcomes, and make informed decisions to adapt and refine future management actions, ensuring the continued success of the CFLRP.

2. Funding

CFLRP and Forest Service Match Expenditures

Fund Source: CFLN and/or CFIX Funds Expended	Total Funds Expended in Fiscal Year 2023
CFLN23 CFLN22 TOTAL	$3,000,000.00 $250,000.00 $3,250,000.00

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
CFSE23 TOTAL	$0 $0

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

Fund Source: Forest Service Discretionary Matching Funds	Total Funds Expended in Fiscal Year 2023
CFRD CFHF TOTAL	$0 $0 $0

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

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
South Yuba River Citizens League	☒ In-kind contribution ☒ Funding	$202,455	Match funds for invasive weeds removal on CFLR landscape, and for contracting environmental review activities	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
The Nature Conservancy	☒ In-kind contribution ☒ Funding	$145,000	TNC staff time to lead the development of the monitoring effort before CFLRP funds were available, TNC staff time and contracts to develop a large-tree drone survey to establish forest conditions.	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
National Forest Foundation	☒ In-kind contribution ☒ Funding	$1,398,061.87	NFF project management salary to implement WCB SFEP funds; implementation of 627.63 acres of fuel reduction	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
Blue Forest Conservation	☒ In-kind contribution ☐ Funding	$85,000	Staff time managing implementation and budget needs for subproject areas by associates and managers	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
Yuba Water Agency	☒ In-kind contribution ☒ Funding	$913,568.00	Staff time and meetings, bond payments, grant tracking and communications (in-kind and labor) and $900,000 funding contribution	☒ National Forest System Lands ☐ Other lands within CFLRP landscape:
Camptonville Community Partnership	☒ In-kind contribution ☐ Funding	$3,000.00	CCP staff time to participate as part of the North Yuba Forest Partnership including leadership, subcommittees, and community coordination	☒ 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
			activities for implementing projects	

Total Partner Match: $2,747,084.87

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]	40,860 (FACTS) (16,290 in database of record)	**0**	40,860 (FACTS)
Hazardous Fuels Reduction (acres) in the Wildland Urban Interface - COMPLETED	FP-FUELS-WUI-CMPLT (reported in FACTS)[4]	780 (FACTS) (342 in	0	780 (FACTS)

[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
		database of record)		
Hazardous Fuels Reduction (acres) outside the Wildland Urban Interface	FP-FUELS-NON-WUI (reported in FACTS) [3]	15,120 (FACTS) (5,194 in database of record)	0	15,120 (FACTS)
Hazardous Fuels Reduction (acres) outside the Wildland Urban Interface - COMPLETED	FP-FUELS-NON-WUI-CMPLT (reported in FACTS) [4]	155 (FACTS)	0	155 (FACTS)
Wildfire Risk Mitigation Outcomes - Acres treated to mitigate wildfire risk	FP-FUELS-ALL-MIT-NFS (reported in FACTS)	935 (0 in database of record)	0	935
Prescribed Fire (acres)	Activity component of FP-FUELS-ALL (reported in FACTS)	374 acres (FACTS + NFF Reporting)	0	374 acres (FACTS + NFF Reporting)
Invasive Species Treatments (acres) - Noxious weeds and invasive plants	INVPLT-NXWD-FED-AC (reported in FACTS)[3]	110 (FACTS) (93 in database of record)	0	110 (FACTS)
Invasive Species Treatments (acres) - Noxious weeds and invasive plants - COMPLETED	INVPLT-NXWD-FED-AC-CMPLT (reported in FACTS)[4]	110 (FACTS) (93 in database of record)	0	110 (FACTS)
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	0	0

[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
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	0	0
Road Improvement (Passenger Car System) (miles)	RD-PC-IMP-MI (Roads reporting)	0	0	0
Road Maintenance (High Clearance) (miles)	RD-HC-MAINT-MI (Roads reporting)	0	0	0
Road Maintenance (Passenger Car System) (miles)	RD-PC-MAINT-MI (Roads reporting)	0	0	0
Trail Improvement (miles)	TL-IMP-STD (Trails reporting)	0	0	0
Trail Maintenance (miles)	TL-MAINT-STD (Trails reporting)	0	0	0
Wildlife Habitat Restoration (acres)	HBT-ENH-TERR (reported in WIT)	0	0	0
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)	0	0	0
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)	0	0	0
Stand Improvement (acres)	FOR-VEG-IMP (reported in FACTS)	0	0	0
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)	0	0	0
Rangeland Vegetation Improvement (acres)	RG-VEG-IMP (reported in FACTS)	0	0	0

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

The Tahoe National Forest (TNF) has faced significant staffing challenges, impacting our ability to fulfill reporting obligations. Key positions have remained vacant, leading to underreported achievements in our Activity Table. Despite this, efforts are underway to fill these essential roles by Fiscal Year 2024, ensuring more accurate reporting and data entry in the future.

Looking ahead to FY24, there is a concerted effort to increase the scale and pace of prescribed fire treatments. A significant portion of our work this year has been focused on preparing areas for burning in the next fiscal year. These preparatory steps are crucial for expanding our capacity to manage prescribed fires safely and effectively in the coming season.

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

The North Yuba CFLRP exemplifies effective interagency collaboration, working across various organizational structures to plan and execute treatment strategies. This collaborative effort is highlighted by the North Yuba Forest Partnership, which includes: Blue Forest Conservation (BFC), Camptonville Community Partnership (CCP), National Forest Foundation (NFF) Nevada City Rancheria (NCR), Maidu, South Yuba River Citizens League (SYRCL), Sierra County, Tahoe National Forest (TNF), The Nature Conservancy (TNC), Yuba Water Agency (YWA). Additionally, the collaboration is supported by two official MOU supporters: Sierra Nevada Conservancy (SNC) and Sierra Pacific Industries (SPI). A notable example of collaborative work across different landholdings involves Sierra Pacific Industries (SPI), a major industrial landowner. In concert with SPI, both the Tahoe National Forest (TNF) and the Plumas National Forest (PNF) align the creation of fuel breaks and schedule harvesting operations to reduce potential effects on wildlife and water resources.

The partnership has established a network of academic and professional collaborations to enhance its forest management strategies. This includes working with the University of Wisconsin on surveys for the California Spotted Owl and Goshawk, engaging with non-governmental organizations to utilize the fire modeling expertise of Pyrologix and the landscape modeling and treatment prioritization skills of Vibrant Planet. In the project planning stages, it involved the University of Massachusetts, Amherst, in collaboration with the Pacific Northwest Research Station, to conduct Historic Range of Variability (HRV) modeling. In the fiscal year 2023, additional partnerships were formed with researchers at UC Davis and within the USFS to monitor forest structure before and after treatment implementations. The insights gained from these studies will be instrumental in guiding treatment plans and evaluating their success.

Further, several additional rewards highlight how the CFLRP in the North Yuba Landscape aligns with other projects and initiatives within Region 5. For example, in FY23, the partnership was awarded the "Partnership of the Year Award" in Region 5. In addition, the CFLRP region has been designated as a Priority Landscape, a status that has secured $25 million in funding from the Bipartisan Infrastructure Law (BIL) for fiscal years 2022 to 2024. Additionally, the Inflation Reduction Act (IRA) contributed financial support to the CFLRP landscape starting in fiscal year 2023.

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?

The North Yuba Forest Partnership's Collaborative Forest Landscape Restoration Program (CFLRP) kicked off in fiscal year 2022, with fiscal year 2023 marking its inaugural year of on-the-ground work. However, the majority of this year's efforts were conducted under the umbrella of the Trapper Project Environmental Assessment (EA), which covered 30,000 acres and was based on the National Environmental Policy Act (NEPA) assessment completed in 2021. A significant achievement in advancing the goals of restoring a fire-adapted ecosystem and reducing hazardous fuels was the completion of the Environmental Impact Statement for the North Yuba Landscape Resilience Project (NYLRP), which spans 275,000 acres. The project's momentum towards increasing the pace and scale of forest restoration was further solidified with the signing of the Record of Decision (ROD) in July 2023.

The Trapper Project aims to treat approximately 15,473 acres to improve forest health and resilience, reduce hazardous surface and ladder fuels, protect wildlife habitat, and enhance watershed conditions across the Yuba River Ranger District. Treatments were specifically designed to restore fire-adapted landscapes and reduce hazardous fuels through commercial thinning, mechanical thinning, hand thinning, mastication, chipping, lop and scatter, pruning, pile burning, underburning, and hazard tree removal.

The project area was strategically prioritized for treatment based on a landscape-scale analysis evaluating factors such as topography, ownership patterns, potential wildfire behavior, existing vegetation and wildlife habitat conditions,

historic recreational use, and proximity to communities and infrastructure. Areas with high fuel loading, susceptible stand conditions, and proximity to at-risk communities and infrastructure were prioritized to maximize the effectiveness of restoring fire-adapted landscapes and reducing fuels across ownerships.

Specific treatment methods were tailored to stand conditions and proximity to valued resources. For example, mechanical thinning was focused on less sensitive slopes while hand thinning was used near riparian areas, archaeological sites, and important wildlife habitat. Underburning, while challenging, was emphasized as a critical tool for reducing surface fuels. Within wildlife Protected Activity Centers, treatments maintained habitat elements while effectively reducing ladder and surface fuels.

The strategic prioritization and coordination of treatments across a broad landscape enabled the project to substantially expand the pace and scale of restoration activities and hazardous fuel reduction compared to previous years. Landscape-level analysis and prioritization were key factors that allowed more acres to be treated.

While the ROD for the NYLRP signifies a significant step forward for increasing the pace and scale of restoration treatments across the CFLRP area, the tangible on-the-ground work in FY23 remained within the scope of the preceding Trapper NEPA assessments. As a result, we have yet to witness an increase in the pace and scale of restoration operations. Nevertheless, the infusion of financial support and the expansion of partnership networks through our collaboration have been instrumental. With the NYLRP's NEPA clearance now in place, the stage is set, and the resources and frameworks necessary for ramping up our restoration efforts are well underway.

If a wildfire interacted with a previously treated area within the CFLRP boundary:
No major wildfires occurred within the CFLRP boundary. As such, no FTEM reports were completed. However, dozens of small fires occurred within the CFLRP region, but all were caught and extinguished quickly.

FY23 Wildfire/Hazardous Fuels Expenditures

Category	$
FY23 Wildfire Preparedness*	N/A
FY23 Wildfire Suppression**	N/A
FY23 Hazardous Fuels Treatment Costs (CFLN, CFIX)	$3,250,000
FY23 Hazardous Fuels Treatment Costs (other BLIs)	N/A

* 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 Trapper Project within the CFLRP aims to implement several treatments to meet ecological goals related to wildlife habitat, invasive species, and watershed health, with a special focus on high departed areas within WUI zones. These treatments, which began in FY23, were strategically located and tailored based on detailed analysis of ecological conditions across the project area.

For wildlife habitat, the project prioritized protection and enhancement of California Spotted Owl (CSO) and Northern Goshawk (NGO) Protected Activity Centers (PACs). Twelve CSO PACs and four NGO PACs were selected to reduce fuels while maintaining important habitat elements like canopy cover. Areas within 500 feet of CSO activity centers were hand thinned to minimize disturbance. Habitat needs drove tailored prescriptions for each PAC.

In FY23, 483 acres were treated in late-seral mixed conifer habitat (highest quality habitat for California Spotted Owl and Northern Goshawk). Of these 483 acres, 344 of the acres treated were within California Spotted Owl and Northern Goshawk PACs.

To control invasive species, the project mapped and inventoried approximately 235 acres of priority invasive plants including starthistle, broom, and knapweed. Treatment methods like herbicide, hand pulling, and revegetation were selected based on target species biology and site conditions. Regular surveying helps adapt treatments as infestations emerge or expand. In FY23, 110 acres were treated for noxious weeds and invasive plant control.

For watershed health, proposed road repair, maintenance, and decommissioning was informed by field surveys showing impacts of roads on soil compaction, runoff, and erosion. Legacy skid trail restoration specifically targeted detrimentally compacted soils. Road work aims to restore natural soil and hydrologic function. At the time of reporting, no data on watershed health or proposed road repairs were entered into FACTS for CFLRP annual reporting.

6. Socioeconomic Goals

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

- **Examples may include activities related to community wildfire protection, contribution to the local recreation/tourism economy, volunteer and outreach opportunities, job training, expanding market access, public input and involvement, cultural heritage, subsistence uses, etc.**

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: _100_%

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

Description	Project Percent
Equipment intensive work	88%
Labor-intensive work	2%
Material-intensive work	0%
Technical services	0%
Professional services	0%
Contracted Monitoring	10%
TOTALS:	100%

[7] Addresses Core Monitoring Question #7

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	**19**	**27**	**1,209,276**	**1,613,893**
Forest and watershed restoration component	**9**	**20**	**718,380**	**1,509,564**
Mill processing component	**7**	**20**	**518,813**	**1,098,412**
Implementation and monitoring	**0**	**0**	**0**	**0**
Other Project Activities	**2**	**3**	**181,641**	**269,404**
TOTALS:	**36**	**70**	**2,628,110**	**4,491,272**

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?

There were no assumptions made when entering TREAT data. The results align well with observations on the ground.

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).

The FY23 TREAT report indicates that 100% of the annual project funding ($3,000,000) was used for contracts with businesses located within the impact area. The project funding supported different types of work, with 88% allocated to equipment-intensive work, 2% to labor-intensive work, and 10% to Contracted Monitoring. There was strong engagement with local forestry sector, with all commercial timber volume harvested under the project done by local logging companies and contract firms. Additionally, the processing of harvested timber was entirely managed by local businesses, with 28% of the volume processed by softwood sawmills and 72% used by large biomass energy plants. These findings show how local industry involvement ranges from traditional lumber processing to renewable energy production.

In FY23, the TREAT report for the CFLRP and matching funding revealed a total of 70 jobs supported or maintained, with 36 direct and 34 indirect/induced jobs, and a total labor income of $4,491,272. The timber harvesting component was the largest contributor, supporting 19 direct jobs and a total of 27 jobs, with direct labor income at $1,209,276 and total labor income of $1,613,893. The forest and watershed restoration segment supported 9 direct jobs, leading to 20 jobs in total, and generated direct labor income of $718,380 with a total of $1,509,564. In mill processing, 7 direct jobs led to a total of 20 jobs, with direct labor income at $518,813 and a total labor income of $1,098,412. The implementation and monitoring component did not support any jobs, while other project activities supported 2 direct jobs and a total of 3 jobs, contributing $181,641 in direct labor income and $269,404 in total.

[8] Addresses Core Monitoring Question #8

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	6080.18
Volume of timber sold TMBR-VOL-SLD	CCF	0
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	0

Reviewing the data above, we have no additional data sources or description to add in terms of wood product utilization.

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 North Yuba Forest Partnership membership remains unchanged since inception with the signing of the Memorandum of Understanding (MOU) on November 7, 2019. Although there have been some personnel changes, each organization remains committed to the original Memorandum of Understanding, the North Yuba Forest Partnership. Support, engagement, and collaboration remain solid, cooperative, and unchanged. For membership list, see table below:

Collaboration Members	**Lead Contact**	**email**
Blue Forest Conservation (BFC)	Zach Knight, CEO	zach@blueforestconservation.com
Camptonville Community Partnership, CCP	Cathy LeBlanc, Executive Director	cathy@theccp.org
National Forest Foundation, NFF	Matt Millar, Sierra Nevada Program Senior Manager	mmillar@nationalforests.org
Nevada City Rancheria, Maidu	Shelly Covert, Secretary, Community Outreach and Spokesperson	nevadacityrancheria@live.com
South Yuba River Citizens League, SYRCL	Melinda Booth, Executive Director	melinda@yubariver.org
Sierra County	Tim Beals, Director of Public Works and Planning	tbeals@sierracounty.ca.gov
Tahoe National Forest, TNF	Eli Ilano, Forest Supervisor	Elisio.Ilano@usda.gov
The Nature Conservancy, TNC	Dan Porter, Forest Strategy Lead	dporter@TNC.ORG
Yuba Water Agency, YWA	JoAnna Lessard, Project Manager	jlessard@yubawater.org

[9] Addresses Core Monitoring Question #10
[10] Addresses Core Monitoring Question #11

Additionally, there are two official MOU supporters:

Sierra Nevada Conservancy (SNC)	Chris Dallas, Central Subregion Representative	Chris.Dallas@SierraNevada.ca.gov
Sierra Pacific Industries (SPI)	Eric Sweet, Tahoe District Manager	ESweet@spi-ind.com

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 parties (Monitoring Team) involved in the monitoring include:

- The U.S. Forest Service (Tahoe National Forest)
- Sierra County
- Nevada City Rancheria
- National Forest Foundation
- The Nature Conservancy
- South Yuba River Citizens League
- Camptonville Community Partnership
- Blue Forest Conservation
- Yuba Water Agency

The monitoring plan can be found in the following Box folder: North Yuba Forest Partnership CFLRP Monitoring Plan

The monitoring is conducted by the Monitoring Team led by The Nature Conservancy, with roles distributed among various individuals from these organizations. This multi-party group is tasked with developing and executing the CFLRP monitoring for the North Yuba treatments, including the North Yuba Landscape Resilience Project (NYLRP). The document lays out an adaptive management framework as a part of the monitoring plan, with specific trigger points to be refined as engagement with the adaptive management process continues.

The monitoring plan was developed over the past year, and as such has undergone many changes based on stakeholder feedback. In the monitoring plan, we commit to annual updates to the plan, which could include changes based on new findings and stakeholder input. The monitoring plan also emphasizes citizen science and a commitment to make monitoring data available on accessible web platforms.

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?

In the fiscal year 2023, we faced several challenges that prevented us from fully realizing our proposed work plan. A significant obstacle was the unusually heavy snowfall in the Sierra Nevada during the previous winter. The extensive snowpack caused delays in scheduled work and significantly narrowed the timeframe for prescribed fires, leading to a decrease in the number of acres we could treat with this method. Furthermore, we encountered an unexpected increase in fir mortality, which necessitated the removal of approximately 100 acres from the Trapper Treatments due to the emergence of hazard trees. Efforts are currently underway to address this shortfall by intensifying prescribed fire treatments at the onset of FY24. Additionally, there has been a lag in data entry into FACTS, but we are taking corrective action by appointing a dedicated individual to manage this task in the upcoming fiscal year, ensuring more timely and accurate data management.

Optional Prompts

FY 2023 Additional Accomplishment Narrative and/or Lessons Learned Highlights
If desired, please use this space to describe accomplishments not already described elsewhere in this report.

Media Recap
Please share any videos, articles, press releases, etc. – you can include links or copy/paste.

Media Releases:
Dec. 3, 2023: **Protecting Watersheds and Preventing Catastrophic Wildfire: Yuba I Forest Resilience Bond Returns Investor Capital, Driving Successful Restoration Efforts on the Tahoe National Forest**
July 12, 2023: Tahoe National Forest completes record of decision for 275,000-acre forest health project
April 7, 2023: Tahoe National Forest publishes North Yuba Landscape Resilience Project final environmental impact statement
April 5, 2023: Tahoe National Forest partners with National Forest Foundation, providing $117 million to reduce wildfire risk on the North Yuba Landscape
Nov. 18, 2022: Tahoe National Forest seeks public input on North Yuba Landscape Resilience Project draft environmental impact statement

Feature Stories/Video:
Dec. 3, 2023: Fire and Forestry: Scaling Restoration Efforts to Protect a Watershed
April 5, 2023: Ripple effect of fire-resilient forests
Nov. 18, 2022: Protecting the North Yuba landscape with thousands of forest acres thinned and restored in California

Visuals
Please paste here or upload visuals if available, including before/after photos, maps, monitoring graphics, etc.
North Yuba Underburn Photos:
https://www.flickr.com/photos/tahoenationalforest/albums/72177720311828342/with/53285018784/

Signatures

Recommended by (Project Coordinator(s)): /s/ Coreen Francis
Approved by (Forest Supervisor(s)): /s/ Matthew Jedra

Draft reviewed by (collaborative representative): /s/ Nicholas Hendershot

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 Pyrologix (FLAMMAP5 + FSim)

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)	8352.03 acres (2.3%)	18993.84 acres (5.3%)	33385.44 acres (9.4%)	42270.11 acres (11.8%)	21614.09 acres (6.1%)	103270.51 acres (28.9%)	128952.2 acres (36.1%)
Landscape model 2 (Second year of CMS) N/A in first reporting year	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Area treated in FY23	13.57 acres (1.1% of treated area)	108.75 acres (8.7% of treated area)	181.03 acres (14.5% of treated area)	104.75 acres (8.4% of treated area)	62.27 acres (5% of treated area)	417.66 acres (33.5% of treated area)	358.5 acres (28.8% of treated area)

*** area treated in FY23 corresponding to flame length in baseline year**

- **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.

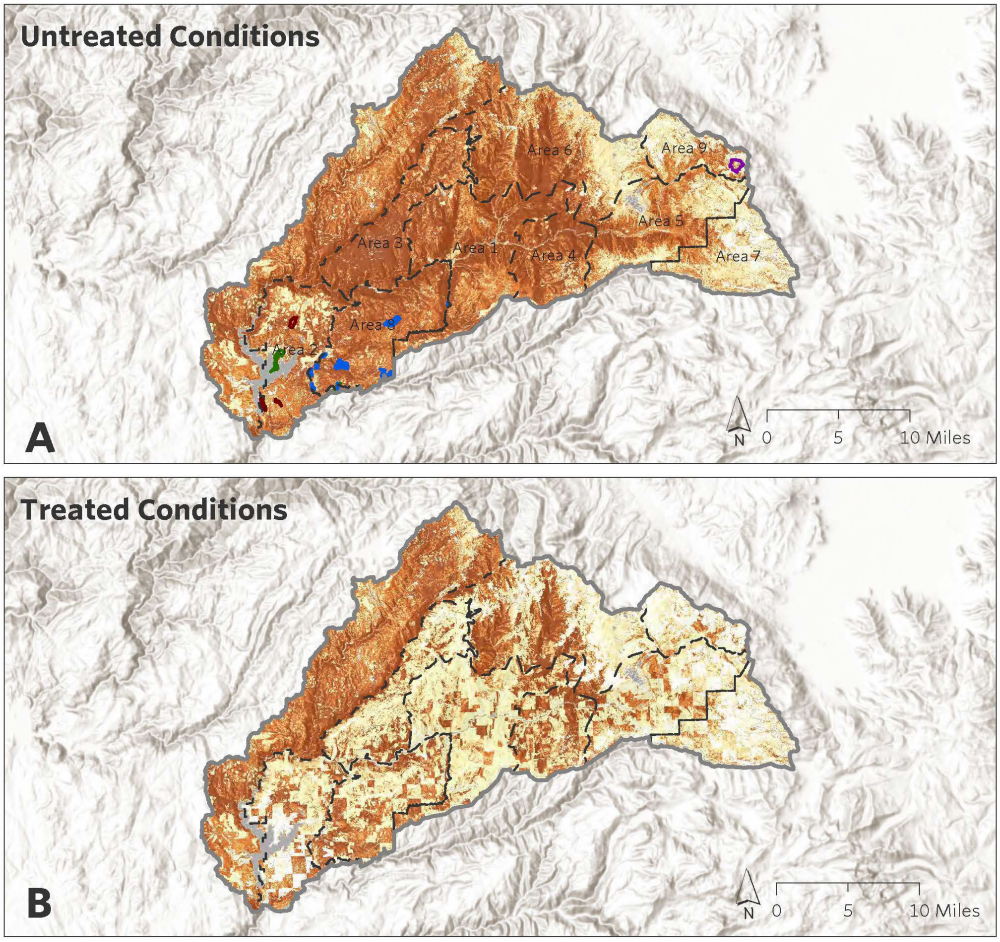
The fire behavior model results above are from modeling efforts by Pyrologix, Inc, with whom we contracted to deliver these data during the production of the draft and final EIS for the North Yuba Landscape Resilience Project (NYLRP). We will use IFTDSS model outputs in subsequent years' reports based on model runs from actual treatments, and will

update the table with baseline numbers. The Pyrologix outputs were modeled on planned treatment types that were analyzed and compared for three treatment alternative scenarios and one untreated landscape scenario in the EIS. The full analysis of the NYLRP fuels can be found in the Fire and Fuels Technical Report (Foster 2023).

For modeled Flame Length baseline conditions, the largest proportion of the landscape (65%) falls under the two longest flame length classes (>11 ft and > 25 ft) indicating that the landscape indeed needs to have fire hazard reduced across most of the landscape (Figure 1). For the treated areas, accordingly, the majority of treatments in 2023 (62.3%) were focused on areas with these two longest flame length areas.

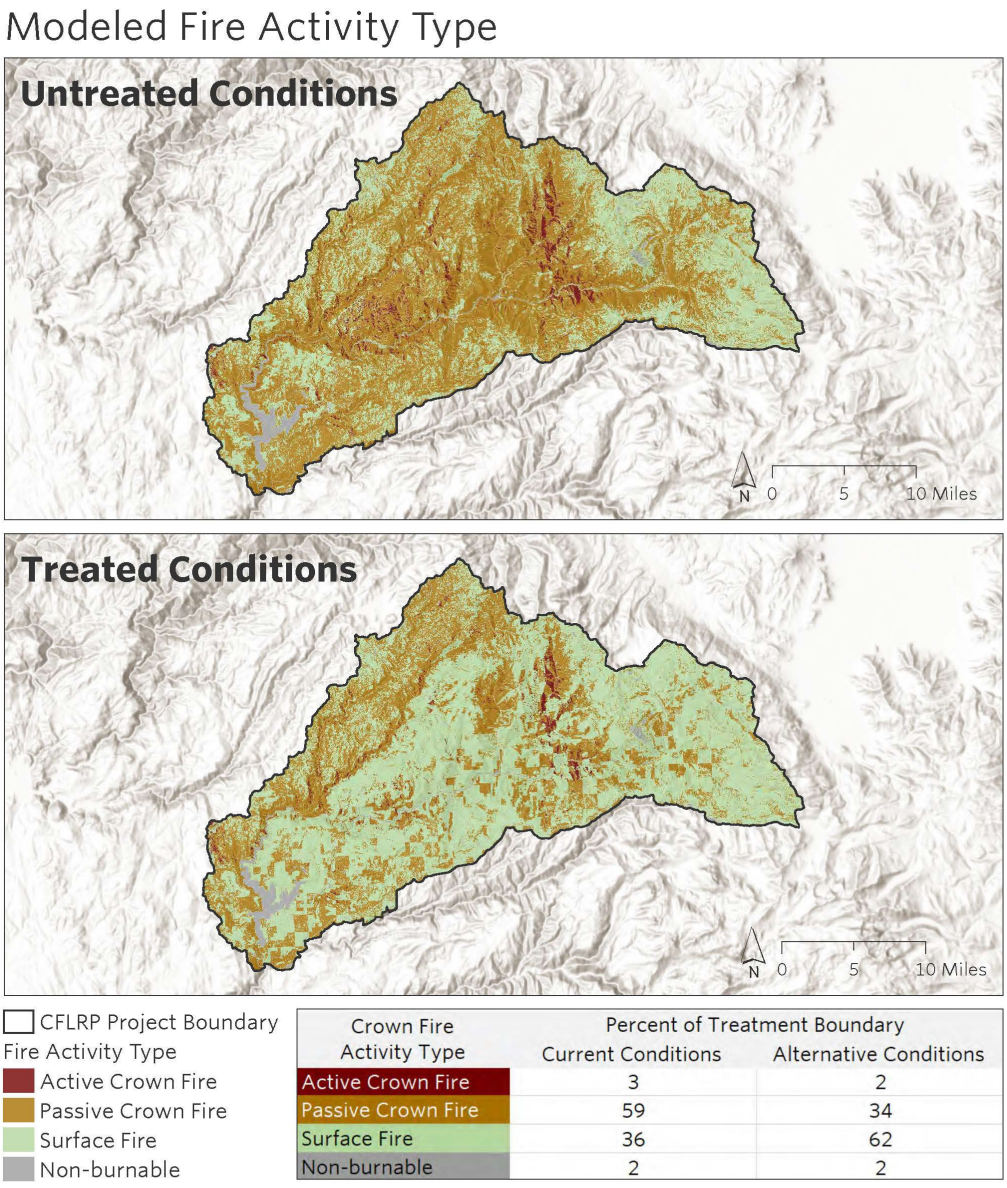
For modeled Fire Type, under existing or baseline conditions, 62% of the landscape is prone to active and passive crown fire (Figure 2). After the proposed and permitted treatments are implemented, only 36% of the landscape will support crown fire, which constitutes a 42% reduction.

Modeled Flame Length



Data Source: Pyrologix

Figure 1. Modeled flame length for the untreated (A) and treated (B) landscape of the North Yuba CFLRP area. Most of the treatment (65%) is designed to reduce fire hazard in the areas with the highest potential to produce uncharacteristically intense wildfire behavior.



Crown Fire Activity Type	Percent of Treatment Boundary	
	Current Conditions	Alternative Conditions
Active Crown Fire	3	2
Passive Crown Fire	59	34
Surface Fire	36	62
Non-burnable	2	2

Data Source: Pyrologix

Figure 2. Modeled Fire activity across the North Yuba CFLRP landscape before and after proposed treatments from the Environmental Impact Statement. Under existing conditions, 62% of the landscape is prone to active and passive crown fire. After the proposed and permitted treatments are implemented, only 36% of the landscape will support crown fire, which constitutes a 42% reduction.

Table 2. Fire Intensity within Sub-Project Area #2 Table 3. Fire Intensity within Sub-Project Area #8

Flame Length Classes – CFLR Sub-Project Area Scale							
	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)	2896.91 acres (9.6%)	1047.26 acres (3.5%)	4148.99 acres (13.8%)	2446.12 acres (8.1%)	1536.75 acres (5.1%)	9542.95 acres (31.8%)	8416.97 acres (28%)
Landscape model 2 (Second year of CMS) N/A in first reporting year	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3. Fire Intensity within Sub-Project Area #8

Flame Length Classes – CFLR Sub-Project Area Scale							
	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)	533.97 acres (1.7%)	380.07 acres (1.2%)	670.08 acres (2.2%)	1675.3 acres (5.4%)	1449.79 acres (4.7%)	10874.88 acres (35.1%)	15380.81 acres (49.7%)
Landscape model 2 (Second year of CMS) N/A in first reporting year	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 4. Fire Intensity within Sub-Project Area #9

Flame Length Classes – CFLR Sub-Project Area Scale							
	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)	173.91 acres (1.2%)	2769.7 acres (19.1%)	3764.03 acres (26%)	2605.13 acres (18%)	721.23 acres (5%)	3486.93 acres (24.1%)	963.19 acres (6.6%)
Landscape model 2 (Second year of CMS) N/A in first reporting year	N/A	N/A	N/A	N/A	N/A	N/A	N/A

At the sub-project level, the Pyrologix data from Tables 2, 3, and 4 show significant variations in fire intensity across different sub-project areas. Sub-Project Area #2 and #8 display a high risk of intense fires, with a notable portion of their landscapes falling under the >25 ft. flame length category. This suggests a need for robust fire management strategies. Conversely, Sub-Project Area #9 exhibits a more varied fire intensity profile but still indicates a presence of high-intensity fire zones. These data highlight a landscape prone to high-intensity fires that require targeted interventions and enhanced fire readiness.

Table 5. Crown fire activity from Pyrologix

IFTDSS Auto-97th crown fire activity output by watershed	**Watershed Number**	**Watershed Name**	**Unburnable**	**Surface Fire**	**Passive Crown Fire**	**Active Crown Fire**	**Crown Fire (combined)**
Initial landscape model (Baseline under CMS)	180201250101	Lavezzola Creek	51.15 acres (0.3%)	3768.7 acres (20.7%)	12470.78 acres (68.4%)	1933.28 acres (10.6%)	14404.06 acres (79%)
	180201250102	Pauley Creek	31.8 acres (0.2%)	6760.13 acres (41.6%)	8604.45 acres (53%)	852.66 acres (5.2%)	9457.11 acres (58.2%)

	180201250103	Downie River	44.03 acres (0.4%)	2107.19 acres (17.7%)	9535.62 acres (80%)	235.07 acres (2%)	9770.69 acres (82%)
	180201250201	Haypress Creek	133.66 acres (0.6%)	12904 acres (62.5%)	7604.56 acres (36.8%)	10.67 acres (0.1%)	7615.24 acres (36.9%)
	180201250202	Deer Creek-North Yuba River	970.53 acres (2.7%)	21565.39 acres (61%)	12781.91 acres (36.1%)	44.26 acres (0.1%)	12826.17 acres (36.3%)
	180201250203	Jim Crow Creek-North Yuba River	329.81 acres (1%)	8418.08 acres (24.5%)	24012.17 acres (69.7%)	1667.96 acres (4.8%)	25680.13 acres (74.6%)
	180201250301	Goodyears Creek-North Yuba River	231.96 acres (1.2%)	4232.17 acres (22.4%)	13933.91 acres (73.7%)	501.72 acres (2.7%)	14435.64 acres (76.4%)
	180201250302	Cherokee Creek-North Yuba River	379.63 acres (1.4%)	5027.23 acres (18.2%)	19789.34 acres (71.7%)	2386.29 acres (8.7%)	22175.64 acres (80.4%)
	180201250401	Canyon Creek	83.18 acres (0.2%)	10358.25 acres (26.5%)	27486.42 acres (70.4%)	1113.97 acres (2.9%)	28600.4 acres (73.3%)
	180201250402	Slate Creek	332.04 acres (0.8%)	15782.46 acres (40.1%)	22719.61 acres (57.8%)	489.05 acres (1.2%)	23208.66 acres (59%)
	180201250403	Willow Creek	1362.61 acres (9.6%)	5709.54 acres (40.1%)	6992.53 acres (49.2%)	160.57 acres (1.1%)	7153.1 acres (50.3%)
	180201250404	Mill Creek-North Yuba River	2233.29 acres (8.3%)	9358.59 acres (34.9%)	14647.36 acres (54.6%)	585.34 acres (2.2%)	15232.7 acres (56.8%)
	180201250405	Little Oregon Creek-North Yuba River	1095.07 acres (9.7%)	4717.21 acres (41.6%)	5530.29 acres (48.7%)	4.89 acres (0%)	5535.18 acres (48.8%)
	180201250501	Pass Creek	86.96 acres (1.9%)	3501.38 acres (75.5%)	1047.03 acres (22.6%)	0 acres (0%)	1047.03 acres (22.6%)
	180201250502	Jackson Meadows Reservoir-Middle Yuba River	128.77 acres (44.8%)	110.75 acres (38.5%)	48.04 acres (16.7%)	0 acres (0%)	48.04 acres (16.7%)
	180201250503	East Fork Creek-	154.79 acres (4%)	2087.62 acres (53.5%)	1659.51 acres (42.5%)	0.67 acres (0%)	1660.18 acres (42.5%)

		Middle Yuba River					
	180201250504	Kanaka Creek	87.4 acres (4.4%)	868.45 acres (43.3%)	1044.81 acres (52.1%)	4.23 acres (0.2%)	1049.04 acres (52.3%)
	180201250505	Wolf Creek-Middle Yuba River	20.68 acres (3.8%)	180.36 acres (33%)	344.93 acres (63.2%)	0 acres (0%)	344.93 acres (63.2%)
	180201250506	Oregon Creek	286.44 acres (1.3%)	7126.64 acres (31.7%)	14904.67 acres (66.2%)	193.71 acres (0.9%)	15098.37 acres (67.1%)
	180201250507	Grizzly Creek-Middle Yuba River	308.02 acres (3.5%)	2405.87 acres (27.2%)	6117.85 acres (69.1%)	26.46 acres (0.3%)	6144.32 acres (69.4%)
Landscape model 2 (Second year of CMS) N/A in first reporting year	180201250101	Lavezzola Creek	51.15 acres (0.3%)	10419.63 acres (57.2%)	6389.4 acres (35.1%)	1363.72 acres (7.5%)	7753.12 acres (42.5%)
	180201250102	Pauley Creek	31.8 acres (0.2%)	11566.97 acres (71.2%)	4160.11 acres (25.6%)	490.16 acres (3%)	4650.27 acres (28.6%)
	180201250103	Downie River	44.03 acres (0.4%)	5297 acres (44.4%)	6417.64 acres (53.8%)	163.24 acres (1.4%)	6580.88 acres (55.2%)
	180201250201	Haypress Creek	133.66 acres (0.6%)	16747.43 acres (81.1%)	3770.26 acres (18.3%)	1.56 acres (0%)	3771.81 acres (18.3%)
	180201250202	Deer Creek-North Yuba River	970.53 acres (2.7%)	28395.57 acres (80.3%)	5979.75 acres (16.9%)	16.23 acres (0%)	5995.98 acres (17%)
	180201250203	Jim Crow Creek-North Yuba River	329.81 acres (1%)	20546.82 acres (59.7%)	12647.36 acres (36.7%)	904.03 acres (2.6%)	13551.4 acres (39.4%)

- **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?**

At the HUC 12 level, the data show significant variations in crown fire activities across different watersheds. Of particular importance, the dominance of Passive Crown Fires in several areas, such as Lavezzola Creek and Pauley Creek, where they constitute 68.4% and 53% of the fire activity, respectively. This suggests a prevalent trend of high-intensity fires that can spread rapidly from treetop to treetop, posing serious control challenges. In contrast, watersheds like Haypress Creek and Deer Creek-North Yuba River exhibit a higher incidence of Surface Fires, accounting for 62.5% and 61% respectively. These are lower intensity fires, primarily confined to the forest floor, and generally easier to manage. The goal in managing these landscapes would typically be to reduce the proportion of Active and Passive Crown Fires, as these are more severe and difficult to control. However, some watersheds, such as Downie River and Jim Crow Creek-North Yuba River, show alarmingly high rates of Passive Crown Fires, at 80% and 69.7%, highlighting the need for targeted fire management strategies in these areas. The treatment data for FY23 also indicates ongoing efforts in fire management, with certain watersheds like Oregon Creek and Grizzly Creek-Middle Yuba River showing interventions. The trend analysis suggests a mixed scenario, with some watersheds much closer to desired fire activity conditions, while others require substantial treatments to mitigate high-intensity crown fire risks.

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

Table 1. Vegetation Departure

Succession Class Area (acres) & % total project area	**Early Development**	**Mid Closed**	**Mid Moderate**	**Mid Open**	**Late Open**	**Late Moderate**	**Late Closed**
Disturbance and successional restoration needed	85,151 acres (18.98%)						
Disturbance only Restoration Needs		73,271 acres (16.32%)	69,224 acres (15.43%)			51,952 acres (11.58%)	85,465 acres (19.05%)
Succession only Restoration Needs							
Rest. Needs Treated				68,237 acres (15.21%)			
Restored to NRV					15,119 acres (3.37%)		
Percent Change	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Running Totals [Initial baseline under CMS[5], Year 5, and/or Year 10]	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Analysis area for vegetation departure is 448,634.646 acres, encompassing the CFLR project boundary. Table columns were updated to use designations used in the HRV work and that reflect the best available science in this region (McGarigal et al. 2023).

Indicator 2. Tally acres burned by wildfire and by prescribed burning annually. Report by fire regime and compare to what would be expected in the natural range of variation.

Acres burned annually					
Report in acres and % of total project area	**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)
Suppression only fires	0	0	0	0	0
Fires managed for multiple resource objectives	0	0	0	0	0
Prescribed Fire	374 acres	0	0	0	0
Total Acres Burned	374 acres	0	0	0	0
Natural Range of Variation (NRV)	303078.95 acres	0 acres	44196.65 acres	1397.95	296.42
Departure ([Acres Burned-NRV])/NRV)* 100	-99.88%	0	100%	100%	100%

Total CFLRP area: 356834.38 acres from CFLRP GIS boundary.

- **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.

In terms of vegetation seral stages and succession classes, nearly 97% of the landscape has departed from historical seral stages and succession classes. Only 3.37% of the landscape currently aligns with the Natural Range of Variation (NRV)/Historic Range of Variability (HRV), specifically within the Late Development Open Canopy Cover class. In contrast, approximately 81% of the landscape, equating to 365,533 acres, is deficient in disturbance. Within these disturbance-deficient areas, nearly 19% are in the Early Development (ED) seral stage, necessitating both disturbance and successional restoration treatments to guide these areas toward NRV/HRV.

The remaining 62% of the landscape that requires disturbance for restoration to NRV encompasses various seral stages, including Mid Development – Closed Canopy Cover, Mid Development – Moderate Canopy Cover, Late Development – Moderate Canopy Cover, and Late Development – Closed Canopy Cover. The presence of treated areas in the mid-moderate canopy cover and restored areas in the late open canopy cover indicates some progress toward restoring the NRV.

This data is necessary for understanding how forest restoration treatments within the CFLRP landscape can contribute to a more resilient state, based on the proportions of the landscape found within different vegetation classes. Overall, these monitoring results highlight significant areas in early and mid-development stages in need of restoration, emphasizing the extent of the landscape's departure from desired conditions.

In terms of its fire disturbance regime, the CFLRP landscape has significantly diverged from its historical ecological conditions. The monitoring data from the landscape shows a near-complete absence of fire in areas that historically experienced frequent low to high-severity fires. Specifically, Fire Regime I should have seen around 303,078.95 acres burned to maintain its natural state. In FY23, 374 acres burned, marking a 99.88% deficit from the natural range of variation. Furthermore, there has been a 100% departure from expected fire activity in Fire Regimes II through V, with zero acres burned, pointing towards a landscape that has not been experiencing the natural fire disturbances it historically did.
However, it's important to note that much of the work in FY23 was dedicated to preparing sites for burns, which implies that the burned acreage is expected to increase in future project years. This groundwork is a key first step for enabling more controlled burns that align with historical fire patterns. Even with the 374 acres burned, this is step in the right direction towards creating a more resilient landscape.

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?"

Table 1: Wildlife Habitat Indicators

Wildlife Habitat Descrip.	Regional or Project-Specific Indicator?	Indicator and Unit of Measure	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
Late-seral mixed conifer habitat (highest quality habitat for California Spotted Owl and Northern Goshawk)	Regional	Acres thinned, fuels treatment, or burned within Highest Quality Habitat	**482.82 acres**	N/A	N/A	N/A	482 acres
Meadows, Aspens, Fens	Project-Specific	Acres restored within meadows, fen, and aspen habitats	239 acres	N/A	N/A	N/A	239 acres

Table 2: Wildlife populations

Wildlife Species Name(s)	**Indicator and Unit of Measure**	**Value in Initial Year of CMS***	**Value in Next Reporting Year of CMS* N/A FY23**	**Desired or Undesired Change? N/A FY23**	**Percent Change N/A FY23**	**Acres of Habitat Treated to Improve this indicator in this Fiscal Year**
California Spotted Owl	Number of known territories	*78*	N/A	N/A	N/A	482

California Spotted Owl	Number of territories completely surveyed	*45*	N/A	N/A	N/A	482
California Spotted Owl	Number of territories occupied	*33*	N/A	N/A	N/A	482
California Spotted Owl	Number of territories with known reproduction	*9*	N/A	N/A	N/A	482
Northern goshawk	Number of known territories	*39*	N/A	N/A	N/A	482
Northern goshawk	Number of territories completely surveyed	*9*	N/A	N/A	N/A	482
Northern goshawk	Number of territories occupied	*6*	N/A	N/A	N/A	482
Norther goshawk	Number of territories with known reproduction	*2*	N/A	N/A	N/A	482
California Spotted Owl	Number of territories w/ geotags	*6*	N/A	N/A	N/A	482
California Spotted Owl	Status of tagged territories (nesting, pair occupancy)	*All pairs, 1 nesting*	N/A	N/A	N/A	482
California Spotted Owl	Average number of days of deployment (w/ useable data)	*44*	N/A	N/A	N/A	482

*Initial Year of Common Monitoring Strategy (CMS) Reporting, with date collected

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.

Data collected from these surveys will be used to inform locations of protected nest cores, Protected Activity Centers (PACs), and territories. These data will also be used to inform surveys, Limited Operating Period protections, and treatment types. It is important to note that the occupancy and nesting data above have several limitations, and do not necessarily inform population trends or impacts of treatments on populations. Surveys have been conducted to support habitat restoration. In future years, different territories will be surveyed each year, depending on which areas are expected to be undergoing treatments. A multitude of factors beyond fuels reduction treatments can impact nesting. Nesting depends on a variety of factors including weather, climate, elevation, timing of spring storms, the presence of barred owls, and both abiotic and biotic habitat characteristics. For example, warm dry springs tend to increase reproductive success. In addition to these confounding factors, it would be difficult to impossible to attribute changes in occupancy and nesting to treatment, given the need for a long-term dataset and territory sample size needed pre-treatment and post-treatment. Treatment impacts on spotted owls within the monitoring timeframe would be best measured by examining fine scale movements relative to treatment types and treatment areas. While geotagging individuals pre- and post-treatment is expensive, it will actually inform project activities since the latest research suggests heterogeneity would benefit CSO foraging.

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

The 2023 breeding season was the first year of University of Wisconsin-lead effort to geotag CA spotted owls to examine treatment effects. These geotags collected data every 20 minutes between May 11th and July 25th. In FY23, a total of six individuals were tagged. Of these tagged individuals, only one was a part of a nesting pair. Of the remaining tagged individuals, four were female and two were males. For each of the individuals tagged, anywhere between 179-736 estimated high quality locations were collected.

In addition to this geotagging work, the University of Wisconsin team is actively removing invading Barred Owls from the range of the California Spotted Owl, including within the North Yuba CFLR project area. In FY23, the team successfully removed a pair of Barred Owls from PAC SIE0032. In addition, a pair of California Spotted Owls recolonized YUB0007 where a barred owl was removed last year.

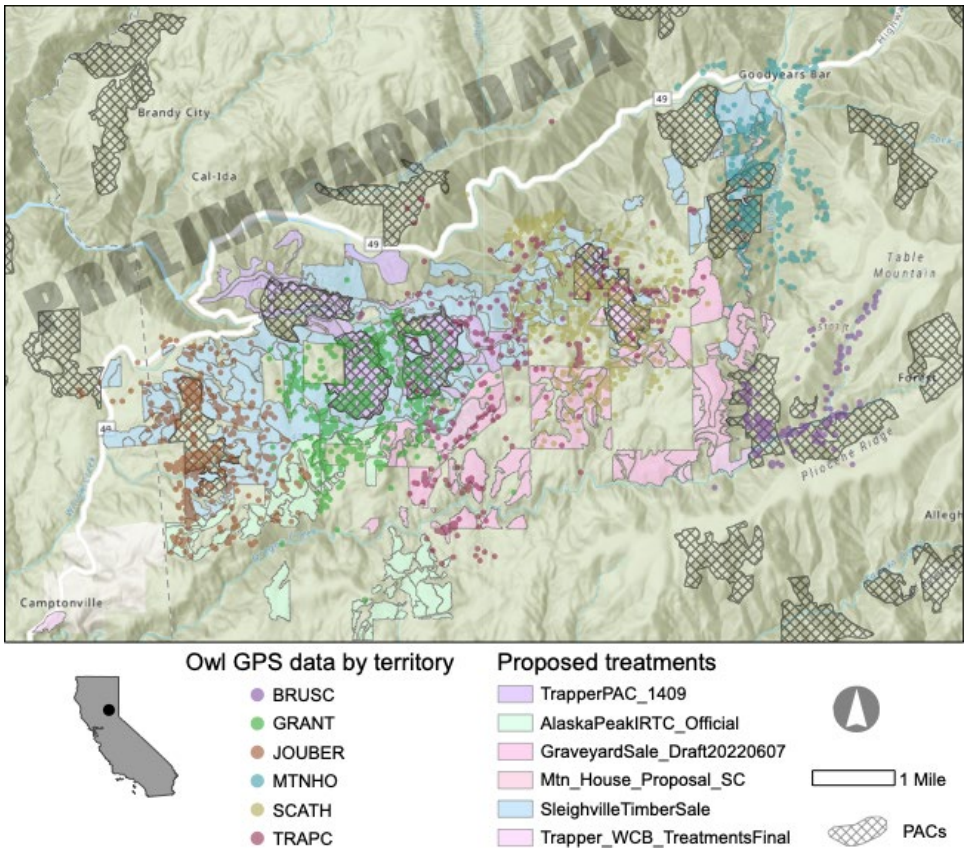


Figure 3. Preliminary data showing point locations of GPS-tagged owl individuals within the North Yuba Landscape. Colored polygons indicate ongoing and future thinning and fuels reduction treatments. Expected start dates and treatment types are as follows: (1) Trapper PAC-fuels-2023, (2) AK Peak-thinning-50% complete, (3) Graveyard-thinning - 2024/2025, (4) Mtn House-fuels-2024, (5) Sleighville-thinning-2025, (5) Trapper WCB-fuels-75% complete.

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

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	2.27	2010
2	Water Quantity	1.80	2010
3	Aquatic Habitat	2.27	2010
Aquatic Biological (Weighted 30%)			
4	Aquatic Biota	1.98	2010
5	Riparian/Wetland Vegetation	1.53	2010
Terrestrial Physical (Weighted 30%)			
6	Roads & Trails	2.31	2010
7	Soils	1.00	2010
Terrestrial Biological (Weighted 10%)			
8	Fire Regime or Wildfire	2.00	2010
9	Forest Cover	1.00	2010
10	Rangeland Vegetation	1.47	2010
11	Terrestrial Invasive Species	1.00	2010
12	Forest Health	1.90	2010
	Avg. Watershed Condition Score	**1.71**	

- **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.

With only one year of data reported for these indicators, we are not yet able to interpret trends in indicator values. The most recent watershed condition data are from 2010 and may not necessarily reflect the current state of the watershed conditions today. The overall average Watershed Condition Score of 1.71 indicates a fair state of the watersheds, pointing to a mix of moderate conditions and several areas of concern. In the aquatic environment, physical attributes like water quality and habitat were deemed to be in fair condition, while biological indicators such as aquatic biota and riparian vegetation showed slightly less favorable conditions.

For terrestrial systems, the physical indicators suggest fair conditions for roads and trails but revealed significant concerns with soil health, which could have far-reaching impacts on watershed integrity. Biological indicators highlighted critical issues, particularly with forest cover and the prevalence of invasive species, which are often indicative of broader ecological problems. The fire regime and rangeland vegetation's health were also areas of concern, although not as severely rated as others.

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

At this time there are no additional watershed condition-related monitoring results to summarize and interpret. However, SYRCL and the TNF will monitor watershed conditions in future years and these tables will be updated accordingly.

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
Barbed Goatgrass	Eradicate	12.17 acres	4.37 acres
Yellow Star-thistle	Eradicate	67.52 acres	3.54 acres
Spotted Knapweed	Eradicate	0.522 acres	0.252 acres
Scotch Broom	Eradicate	26.64 acres	0.0296 acres
Medusahead	Eradicate	5.87 acres	0 acres
Rush Skeletonweed	Eradicate	8.5 acres	0 acres
French Broom	Eradicate	0.453 acres	0 acres
	Totals/Avgs	**121.675 acres**	**8.1916 acres**

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

- **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 the condition on your landscape, please note that and provide context.
- **Does your CFLRP project have additional invasives-related monitoring results to summarize and interpret?** If so, please provide that here.

The invasive species treatments worked to eradicate seven major invasive plant species over a total area of 121.675 acres within the North Yuba landscape. The largest treatment area is for Yellow Star-thistle, covering 67.52 acres, followed by 26.64 acres treated to eradicate Scotch Broom, and 12.17 acres treated for Barbed Goatgrass. The remaining treated areas covered fewer acres on the landscape, and worked to eradicate Rush Skeletonweed (8.5 acres), Medusahead (5.87 acres), Spotted Knapweed (0.522 acres), and French Broom (0.453 acres).

Across the seven plant species treated, the number of acres monitored largely corresponds to the amount of areas treated, with the greatest number of acres monitored for Yellow Star-Thistle (3.54 acres) and Barbed Goatgrass (4.37 acres). The remaining plant species had fewer than 0.25 acres monitored (Spotted Knapweed and Scotch Broom) or zero acres monitored (Medusahead, Rush Skeletonweed, French Broom).

There are no additional monitoring results to summarize and interpret.

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.

The scope of our reporting metrics, which predominantly focus on acres treated, does not always capture the full extent of our on the ground accomplishments, especially when considering the management of invasive species within our project areas. It's important to recognize that manual treatments, although they may cover less acreage, are critical in addressing priority infestations at the leading edge and newly identified small outbreaks. These efforts are substantial and integral to our long-term goals of invasive species management, yet they may not appear as impactful in short-term monitoring due to the smaller acreage involved.

In the short term, these manual treatments may not seem to contribute significantly to our landscape goals when measured solely by the area. However, the long-term benefits, such as preventing the spread of invasive species and preserving native ecosystems, are significant. The effectiveness of our approach is better reflected by the number of infestations addressed rather than the total acres treated. This is especially true for smaller, targeted efforts that, while cumulatively covering less ground, are crucial for early detection and rapid response to invasions.

Conversely, when larger infestations are treated using contractors and herbicides, the acreage treated is a more accurate reflection of our progress. These treatments, which are often necessary to manage extensive invasions, can show a more immediate impact in terms of area cleared and can be tracked effectively in the short term through our current reporting methods.

In summary, while our short-term treatments, particularly manual ones, may not be fully represented in acre-based reporting, they are essential steps towards achieving our long-term restoration and resilience goals. These short-term actions help to maintain the ecological integrity of our landscapes, contributing to the long-term health and sustainability of our forests. It is vital for our reporting to evolve to recognize the value of these efforts, ensuring that our measures of success align with our commitment to comprehensive, landscape-level stewardship.

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

The data presented here from Headwater Economics includes a summary across Yuba County and Sierra County, CA for the year 2021.

Indicators	Response for Initial Year of Common Monitoring Strategy
"Population" most recent year available (tab 1, Forest Service report)	**3,238 (Sierra County) + 83,421 (Yuba County) = 86,704**
"Percent of total, race & ethnicity" most recent year available (tab 11, Forest Service report)	White alone – 58,433 Black or African American – 2,883 American Indian – 1,228 Hispanic ethnicity – 24,042 Non-Hispanic Ethnicity – 59,441
"Unemployment rate" most recent year available (tab 1, Forest Service report)	8.3%
"Per capita income" most recent year available (tab 1, Forest Service report)	$52,827

"Wildfire Exposure, % of Total, Homes" most recent year available (see Wildfire Risk report)	Homes Directly Exposed - 43.0% Homes Indirectly Exposed - 52.0% Homes Not Exposed - 6.0%

- **Provide a brief, narrative context for the data provided above, including any other key socioeconomic conditions to highlight for your landscape.** If the data above does not accurately reflect socioeconomic conditions in/around your landscape please note and provide context.
- **Would you expect CFLRP activities to directly or indirectly impact any of these social and/or economic conditions?** If so, how?
- **Does your CFLRP project have additional socioeconomic monitoring results to summarize and interpret?** If so, please provide that here.
- **Based on the information reported, (and any other relevant monitoring information and discussion), what (if any) actions or changes are you considering?**

The North Yuba CFLRP project area covers the West Sierra Census County Division (CCD) in Sierra County and the Yuba Foothills CCD in Yuba County, CA. However, for this report, the data provided summarizes the socio-economic and environmental conditions in Yuba and Sierra Counties, CA. The total population across the two counties is 86,704, with the majority of the population residing within Yuba county and outside of the CFLRP study area. Nonetheless, this figure serves as a baseline for assessing the proportion of various racial and ethnic groups, as well as for calculating per capita income and understanding the scale of potential impacts from wildfires. The breakdown of the population by race and ethnicity in Yuba and Sierra Counties shows a majority of White individuals (58,433), with smaller representations of Black or African American (2,883), American Indian (1,228), and those of Hispanic ethnicity (24,042). Non-Hispanic Ethnicity individuals number 59,441, indicating that the White non-Hispanic population is the majority.

The unemployment rate in the area in 2021 was 8.3%, 3% higher than the national average at the time of 5.3%. This suggests more greater economic challenges than the national average and could reflect a greater need for economic development initiatives. The per capita income is $52,827, which is substantially lower than the national average of $69,275.

Finally, in Yuba and Sierra Counties, 43.0% of homes are directly exposed to wildfires, while 52.0% are indirectly exposed. Only 6.0% of homes are not exposed, which indicates a high risk of wildfire impact in these communities.

Given the higher-than-average unemployment rate of 8.3% in Yuba and Sierra Counties, the CFLRP projects hold the potential to provide these much-needed employment options, which could be a boon for the local economy. Moreover, the threat of wildfires to a considerable portion of homes in these areas makes CFLRP's role in diminishing this risk all the more crucial. Initiatives to improve wildfire management practices are needed for the protection of these communities to bolster their overall resilience in the face of increasing severity and size of wildfires. Given that the per capita income is relatively lower than the national average, CFLRP projects have the opportunity to significantly elevate local incomes, especially if they are structured to yield sustainable economic advantages. Finally, with the insights into the racial and ethnic composition of the population, it becomes increasingly important to ensure that the benefits of CFLRP's initiatives are allocated fairly and equitably, reflecting the diversity within the communities.

Of primary concern for this CFLRP is the enhancement of mitigation efforts to combat the notable wildfire risk, which requires a strengthened focus on protecting homes and bolstering the safety of communities. Programs should be structured to stimulate economic growth and improve the standard of living. In addition, CFLRP activities should be conducted in an inclusive manner. This means ensuring that all segments of the community have access to the opportunities created and that the distribution of benefits from such activities is fair and balanced across different racial and ethnic groups.

(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?"

Timber harvest by county*:*

County	**MBF**	**Percentage of harvest**
Sierra	3,337.14	100
Yuba	0.00	0.00
TOTALS		100%

Timber harvest by product:

Product	**MBF**	**Percentage of harvest**
Sawtimber (01)	3,337.14	100
TOTALS		100%

Number of active timber processing facilities within the local area (provide quantitative summary and brief description) There are 2 sawmills that are active timber processing facilities within the local area. The two sawmills are owned by Sierra Pacific Industries and are located in Lincoln and Oroville. The Oroville facility only accepts incense cedar.

Additional Indicator:

- Origin of timber processed by mills in CFLRP project area: The Alaska Peak Integrated Resource Timber Contract located in the CFLRP project area has timber purchased and being processed by a mill operated by Sierra Pacific Industries.

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

Monitoring Questions #12: "How well is CFLRP encouraging an effective and meaningful collaborative approach?" (Reported every 2-3 years)

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?

Reflecting on the summary provided by SWERI, the CFLRP project has demonstrated a strong and effective collaborative approach. The results demonstrate the high levels of engagement (70% of respondents), and a positive perception of the collaboration (65% of respondents considering it very collaborative). These findings highlight the commitment of the North Yuba Forest Partnership participants to the project's goals of restoring forest resiliency, reducing community wildfire risk, and increasing the pace and scale of restoration.

The assessment process was generally well-received, with substantial agreement on various aspects of collaboration, from stakeholder engagement to shared motivation and the capacity for joint action. Nonetheless, time has been identified as a limiting resource. In response to the challenges, needs, and recommendations identified, three specific actions are to be considered: Firstly, finding ways to actively involve collaborative partners throughout the NEPA process, secondly, revisiting and updating the MOU and governance structures annually for better cohesion, and thirdly, prioritizing landscape-scale needs and relying on NGOs and private entities to perform when necessary.

To address the challenges and support the recommendations from the assessment, guidance on efficient time management and facilitation of inclusive participation throughout the NEPA process would be beneficial. Support for adaptive management practices and clarity on engagement strategies could further strengthen the collaborative's effectiveness. Finally, assistance in developing a framework for annual reviews of governance structures and MOUs could ensure that the collaboration remains dynamic and responsive to changing conditions and stakeholder needs.

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