CFLRP Project Name (CFLR#): Deschutes Collaborative Forest Project

National Forest(s): Deschutes National Forest

1. Executive Summary

Briefly summarize the top ecological, social, and economic accomplishments your CFLRP project participants are most proud of from FY23 and any key monitoring results. This is a space for key take-home points (< 500 words).

As an original landscape under the Collaborative Forest Landscape Restoration Program (CFLRP), the Deschutes Collaborative Forest Project (DCFP) and Deschutes National Forest (NF) have demonstrated a lasting commitment to forest restoration and collaboration. Fiscal year 2023 (FY23) marked the second year of funding under the CFLRP 5-Year Extension of Funds and an opportunity to leverage resources and outcomes with the Buttes to Basin project (<u>https://bit.ly/Buttes2Basins)</u> under the Joint Chiefs' Partnership and Central Oregon Focal Landscape (<u>https://www.fs.usda.gov/sites/default/files/WCS-Initial-Landscape-Investments.pdf</u>) under the national Wildfire Crisis Strategy (WCS). Collectively, these initiatives bolstered risk reduction to protect communities and infrastructure, supported a diversity of restoration activities, and ensured collaborative staffing for the important work of the Deschutes Collaborative Forest Project (DCFP).

In FY23, total hazardous fuels reduction acres increased by 57% and prescribed fire treatments increased by 45%. WCS and CFLRP funding supported the acquisition of acoustic monitoring units and software to conduct required surveys more effectively for critical species such as Northern spotted owl and gray wolf in on-going implementation and planning projects. The acres of invasive plant treatments almost doubled and several cross-boundary efforts with private landowners and City of Bend supported 606 acres of heritage surveys and 1,410 acres of mechanical fuels treatments to reintroduce low-intensity fire.

In 2023, the Collaborative focused efforts in filling critical Steering Committee seats, revising the charter, enhancing engagement with the Forest Service, and accomplishing the goals of the key subcommittees: Monitoring and Adaptive Management, Outreach, Prescribed Fire, and Restoration Planning. Every subcommittee had robust DCFP participation and a designated Forest Service representative to ensure timely coordination for agenda development and logistical planning for field visits. The DCFP also focused on becoming more fluent in the economic and operational considerations of the timber industry to recognize and support their critical role as partners in forest restoration.

The Monitoring and Adaptive Management Subcommittee hosted 4 field trips to address Collaborative concerns to evaluate the potential cutting of big trees in treated units. They reviewed plant association Zones of Agreement, NEPA objectives, and marking prescriptions and measured stumps and basal area to ensure no big trees were harvested. The Outreach Subcommittee increased DCFP visibility and messaged the importance of active restoration by updating the DCFP website, increasing online presence, and tabling at partner events. The Restoration Planning Subcommittee finalized core wildlife habitat recommendations for vegetation and roads and trails management to address wildlife disturbance and habitat fragmentation. They also partnered with the Deschutes Trail Coalition to integrate recreation perspectives and ensure a shared stewardship approach to trail planning and outreach and education to discourage user-created routes. Finally, the Prescribed Fire Subcommittee invested in the on-going challenges to increasing prescribed fire due to smoke management regulations. They wrote a letter to the EPA regarding the PM 2.5 rule change and recently engaged with the EPA directly (among other local, state, and federal partners) during a tabletop exercise in Bend, OR. A key CFLRP landscape project, West Bend, will become a pilot for prescribed burns to collect smoke and

particulate data to evaluate how smoke moves in the community and impacts to resident health, the economy, and quality of life.

2. Funding

CFLRP and Forest Service Match Expenditures

Fund Source:	Total Funds Expended
CFLN and/or CFIX Funds Expended	in Fiscal Year 2023
CFLN22	\$45,000
CFLN23	\$503,833.41
CFIX23	<u>\$189,576.05</u>
TOTAL	\$738,409.46

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	<u>\$118,356.31</u>
TOTAL	\$118,356.31

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 <u>Program Funding</u> <u>Guidance</u>.

Fund Source:	Total Funds Expended
Forest Service Discretionary Matching Funds	in Fiscal Year 2023*
RTRT	\$133,872.42
CWKV	\$28,141.50
NFHF	\$92,300.00
NFTM	\$397,860.00
NFWF	\$120,690.00
NFVW	\$28,510.00
IRHF	\$141,821.51
NIHX	<u>\$774,568.76</u>
TOTAL	\$1,717,764.2

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 <u>Program Funding Guidance</u>, federal dollars spent on non-NFS lands may be included as match if aligned with CFLRP proposal implementation.

*Match workplans were not developed for the funds listed above and not reported in FMMI as CFLRP match. The official FMMI CFLRP total was \$0. The majority of these Budget Line Items were associated with either Joint Chiefs' or Wildfire Crisis Strategy funding.

Partner Match Contributions¹

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
Central Oregon Forest Stewardship Foundation (COFSF)	☑ In-kind contribution□ Funding	\$48,089	Partner match of staff and materials and supplies contributed to Challenge Cost-Share agreement to support DCFP staffing and facilitation	 ☑ National Forest System Lands □ Other lands within CFLRP landscape:
The Nature Conservancy (TNC)	 ☑ In-kind contribution □ Funding 	\$54,007	TNC staff, materials and supplies, and travel expenses under Challenge Cost-Share agreement to maintain, enhance and restore forest ecosystem process and function by increasing the scope and scale of forest restoration on federal	 National Forest System Lands Other lands within CFLRP landscape:
Clackamas County Fire District 1	 ☑ In-kind contribution □ Funding 	\$3,148	Fire District hand-crew, materials and supplies, and travel expenses under a Participating Agreement to increase wildfire resiliency and reduce the threat of catastrophic wildfire to communities.	 ☑ National Forest System Lands □ Other lands within CFLRP landscape:
Shanda Asset Management	 ☑ In-kind contribution □ Funding 	\$485,100	Oregon Senate Bill 762 funds associated with the Central Oregon Shared Stewardship Alliance's Landscape Resiliency Project	 National Forest System Lands Other lands within CFLRP landscape:
Forest Volunteer Program	 ☑ In-kind contribution □ Funding 	\$1,099,835	Volunteer work primarily in the areas of education and outreach, public information and interpretation,	 National Forest System Lands Other lands within CFLRP landscape:

¹ Addresses Core Monitoring Question #13

CFLRP Annual Report: 2023

Fund Source:	In-Kind Contribution or	Total Estimated	Description of CFLRP	Where activity/item is
Partner Match	Funding Provided?	Funds/Value for	implementation or	located or impacted
		FY23	monitoring activity	area
			significant trail	
			maintenance, fire	
			prevention and	
			campground	
			hosts/facility caretakers	

TOTALS

Total In-Kind Contributions: \$1,690,179

Total Funding: --

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	\$ N/A. There were no Integrated Resource
FY23	Timber Contracts (IRTC) awarded in
	FY2023.
Revenue generated through Good Neighbor Agreements	Totals
	\$ N/A. There was no revenue generated
	within the CFLR Boundary in FY2023

"Revised non-monetary credit limit" should be the amount in the "<u>Progress Report for Stewardship Credits, Integrated</u> <u>Resources Contracts or Agreements</u>" 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 Accomplishments² - 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	13,478	1,410*	14,888

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

Core Restoration Treatments	Agency Performance Measure	NFS Acres	Non-NFS Acres	Total Acres
Hazardous Fuels Reduction (acres) in the Wildland Urban Interface - COMPLETED	FP-FUELS-WUI-CMPLT (reported in FACTS) ⁴	11,234	0	11,234
Hazardous Fuels Reduction (acres) outside the Wildland Urban Interface	FP-FUELS-NON-WUI (reported in FACTS) ³	5,794	0	5,794
Hazardous Fuels Reduction (acres) outside the Wildland Urban Interface - COMPLETED	FP-FUELS-NON-WUI-CMPLT (reported in FACTS) ⁴	1,777	0	1,777
Wildfire Risk Mitigation Outcomes - Acres treated to mitigate wildfire risk	FP-FUELS-ALL-MIT-NFS (reported in FACTS – NOTE: this performance measure will not show up in the CFLRP gPAS report, please report totals directly from FACTS)	1,826	0	1,826
Prescribed Fire (acres)	Activity component of FP-FUELS- ALL (reported in FACTS - NOTE: this performance measure will not show up in the CFLRP gPAS report, please report totals directly from FACTS)	3,566	0	3,566
Invasive Species Treatments (acres) - Noxious weeds and invasive plants	INVPLT-NXWD-FED-AC (reported in FACTS) ³	1,872	0	1,872
Invasive Species Treatments (acres) - Noxious weeds and invasive plants - COMPLETED	INVPLT-NXWD-FED-AC-CMPLT (reported in FACTS) ⁴	1,872	0	1,872
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)	0.4	0	0.4
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

⁴ New Agency measure reported in FACTS when completed

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 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)	487	0	487
Stream Crossings Mitigated (i.e. AOPs) (number)	STRM-CROS-MITG-STD (reported in WIT)	1	0	1
Stream Habitat Enhanced (miles)	HBT-ENH-STRM (reported in WIT)	4.63	0	4.63
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)	553	0	553
Stand Improvement (acres)	FOR-VEG-IMP (reported in FACTS)	491	0	491
Reforestation and revegetation (acres)	FOR-VEG-EST (reported in FACTS)	305	0	305
Forests treated using timber sales (acres)	TMBR-SALES-TRT-AC (reported in FACTS)	2,094	0	2,094
Rangeland Vegetation Improvement (acres)	RG-VEG-IMP (reported in FACTS)			

* These accomplishments do not match the gPAS report, either because the accomplishments were not entered into their respective databases by the November 6, 2023 deadline or the value is different because integrated targets were not included.

Staffing continues to be challenging for the unit and the below table documents unreported acres not reflected in the gPAS report. These treatments were not entered before the November 6, 2023 deadline or because integrated targets were not included. The unit is in process of filling a database administrator position which should correct this situation prior to next year's reporting.

Core Restoration Treatments	Agency Performance	NFS Acres	Non-NFS	Total Acres
	Measure	(unreported)	Acres	(unreported)
Road Improvement (High Clearance)	RD-HC-IMP-MI (Roads	28.02	0	28.02
(miles)	reporting)			
Road Improvement (Passenger Car	RD-PC-IMP-MI (Roads	5.89	0	5.89
System) (miles)	reporting)			
Road Maintenance (High Clearance)	RD-HC-MAINT-MI (Roads	15.78	0	15.78
(miles)	reporting)			
Road Maintenance (Passenger Car	RD-PC-MAINT-MI (Roads	14.02	0	14.02
System) (miles)	reporting)			
Trail Improvement (miles)	TL-IMP-STD (Trails	0.5	0	0.5
	reporting)			

Trail Maintenance (miles)	TL-MAINT-STD (Trails	615	0	615
	reporting)			
Water or Soil Resources Protected,	S&W-RSRC-IMP (reported	2059	0	2059
Maintained, or Improved (acres)	in WIT)			

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

CFLRP, Joint Chiefs', and the Wildfire Crisis Strategy

The CFLR landscape, Buttes to Basin (Joint Chiefs) landscape, and Central Oregon Focal Landscape (WCS) overlap, with the CFLR landscape covering approximately 75% of the Buttes to Basin footprint adjacent to the communities of Bend and Sisters; and the Central Oregon Focal Landscape boundary incorporating the entirety of the Deschutes NF and Crooked River National Grassland and surrounding land ownerships (Figure 1). Over the years, the more tenured CFLRP and Joint Chiefs' program objectives provided a strong foundation for Deschutes NF staff to increase collaborative restoration efforts that are aligned with the stated goals of the National Wildfire Crisis Strategy (Confronting the Wildfire Crisis (usda.gov) by promoting the building blocks of partnership engagement, community involvement, and leveraged investments to effectively treat more acres using an all-lands approach to building social license, strategic planning, implementation, and monitoring.



Figure 1. Relationship of DCFP (CFRLP) Landscape, Buttes to Basin Landscape (Joint Chiefs'), and Central Oregon Focal Landscape (WCS)

FY23 represented the second year of the CFLRP 5-Year Extension of Funds and WCS funding and final year of funding for the Joint Chiefs' project. These priority landscapes are characterized by an expansive WUI area, a mosaic of ponderosa pine, lodgepole pine, and mixed conifer forest types within high risk firesheds, high use recreation opportunities, and the Bridge Creek Watershed, an important water source for the 100,000+ residents within the City of Bend. Partnership with NRCS through the Joint Chiefs' initiative opened the door to multiple cross-boundary implementation projects with privately-owned timber lands through the Wyden Authority. Similarly, enhanced partnership with the Oregon Department of Forestry (ODF) through the WCS program has created opportunities with additional private forestlands for future cross-boundary implementation. These are critical treatments in strategic areas that are aimed at reducing the negative impacts of wildfire to infrastructure and communities. FY23 cross-boundary efforts adjacent to or within the CFLR boundary are outlined in the table below.

FY23 Cross-Boundary Projects with Private and Municipal Partners

Project	Acres	Activity	Future cross-boundary activity	Comments
Erb (Brian Erb Revocable Trust)	27	Thin/Pile	Underburning	Received funding under Oregon SB762 through COSSA partnership
Petersen (James Braund and Rebecca Peterson)		Planning	Underburning	Masticated in FY22 in preparation of future underburning. Funding through NRCS
Taylor NW	119	Heritage Survey	Underburning	Forest Service specialist completed heritage surveys
City of Bend Parks & Recreation	487	Heritage Survey	Underburning	Forest Service specialist completed heritage surveys
Landscape Resiliency Project, Skyline Forest (Shanda Asset Management)	1,386	Thin/pile	Underburning	Received funding under Oregon SB762 through COSSA partnership

The most significant challenge associated with having 3 national funding initiatives occurring on Deschutes NF at the same time is the level of internal and external coordination required to fully executive the significant increase in planned accomplishments in a single fiscal year. The various stages of implementing projects on the ground involve a high level of integration of several programs at the local unit level, consistent coordination with centralized organizations like Grants

and Agreements and Contracting, tracking shifting markets and funding contract costs, aligning with partner availability, and coordinated upward reporting to track year-end accomplishments. While this past fiscal year represented another opportunity to learn how to improve coordination, an investment in real-time communications and new project management tools are critical in order to be successful. Those investments are currently focused within the WCS, and the application will benefit the entire FY24 program of work.

Shared Stewardship

In June 2023, the Central Oregon Shared Stewardship Alliance (<u>Coordinating Shared Stewardship in Central Oregon</u> (<u>cofsf.org</u>) finalized work in the Landscape Resiliency Project (<u>Landscape Resiliency Project - Central Oregon Forest</u> <u>Stewardship Foundation (cofsf.org</u>) with treatments located on state, county, city, and private lands surrounding the Deschutes NF. The project was funded by State of Oregon Senate Bill 762, with partners collectively receiving over \$6 million over an 18-month period. One COSSA partner included in the Landscape Resiliency Project, Shanda Asset Management, completed 1,386 acres of risk reduction work located within the CFLR boundary on the Skyline Forest (35,000-acre private property immediately to the west of the City of Bend). This fuel reduction project ties into a portion of the far eastern boundary of the 2014 Two Bulls wildfire, creating a large fuel break on the most eastern area (high use and close proximity to Bend) of the Bull Springs Tree Farm.

4. Restoring Fire-Adapted Landscapes and Reducing Hazardous Fuels

Narrative Overview of <u>Treatments Completed in FY23</u> to restore fire-adapted landscapes and reduce hazardous fuels, including data on whether your project has expanded the pace and/or scale of treatments over time, and if so, how you've accomplished that – what were the key enabling factors?

The Deschutes NF provides countless benefits to the residents of Central Oregon, including clean air and water, a strong sense of place and a robust economy based on forest products, tourism, and recreational opportunities. The CFLR landscape incorporates 65% of wildland-urban interface (WUI) on the Deschutes NF and numerous high use recreation areas. Nearly all treatments occur in areas classified as "high" to "very high" risk on the Wildfire Hazard Potential map, and wildfires that were to escape initial attack efforts in the landscape are only one to two burn periods away from any one of the communities of Bend, Sisters, Sunriver and Black Butte Ranch. In FY23, risk reduction treatments continued around these communities; further expanding upon the suite of restoration completed to date in both new and long-standing project areas.

WCS objectives nationally and locally promoted the expansion of Forest partners, collaborators, and cooperators to increase the pace and scale of restoration by completing outstanding NEPA-ready work and setting strategic priority treatments for the future. Additional partnerships have created a space for more cross-boundary work adjacent to communities and within the WUI. Although FY23 represents the final year of funding for the Buttes to Basins (Joint Chiefs') project, collaboration between the Deschutes NF and NRCS continues to support private landowners that are eligible for Bipartisan Infrastructure Law (BIL) funding.

Hazardous fuels reduction in the CFLR landscape included over 1,800 acres of final treatments implemented in the Rocket, SAFR, and West Bend projects. There were also 1,200 acres of piles burned in Rocket. Cabin Butte is a new vegetation management project area adjacent to Rocket that lies mostly outside of the CFLR boundary. However, the first contract in Cabin Butte awarded 5,100 acres of restoration treatments that will provide continuity of risk reduction across the landscape. Nearly 4,000 acres of mechanical treatment was awarded in the Kew project area (in the CFLR

boundary) and close to 6,000 acres of mowing and mastication was accomplished either as preparation for future underburning or to maintain past hazardous fuels reduction investments.

Prescribed fire was conducted within and adjacent to the CFLR landscape in collaborative partnership with the Oregon Department of Transportation, City of Bend Fire Department, Sisters Camp Sherman Fire Department, Clackamas County Fire District, Bureau of Land Management and ODF. A 126-acre prescribed fire was conducted along the border shared with the city limits of Sisters and coordinated with city, county, and state personnel. Additionally, discussion and initial planning commenced for a pilot prescribed fire in the West Bend project (Spring 2024) to evaluate the current approach to air quality policy and prescribed fire to potentially reduce the regulatory barriers to increasing the pace and scale of restoration. This effort is a collaboration between the Deschutes NF, PNW Region 6, USDA Office of the Secretary, EPA, US Department of Interior, Oregen Department of Environmental Quality, ODF, and the Deschutes County Department of Health Services.

In an inflation-based environment we have been surprised at numerous understory treatment bids coming in below government estimates suggesting that a sustained contracting workforce has been developed and is leading to price competition. Another factor impacting treatment costs is the reduced effort required for maintenance activities including second entry underburning and mowing-mastication. As engagement within the community and treatment across the landscape proceeds, we continue to conclude that utilizing fire as a restoration and maintenance tool will be supported and yield positive outcomes. The Forest intends to continue working with the DCFP and other partners to enhance public outreach and education efforts in order to better demonstrate the successful results of past fuel treatments, increase community dialogue surrounding the WCS, and support our partners as they increase treatments on non-NFS land.

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

For fuel treatment areas within the CFLR boundary, please upload to Box

There are 23 wildfires in the FTEM database that indicate interactions with previous fuel treatment activity in the CFLR landscape. All of these wildfires were determined to exhibit reduced fire behavior due to the previous fuel treatments, inevitably leading to successful initial attack suppression and control of the unplanned wildfire (Interactions and monitoring information uploads to BOX, "20231214_FTEM Monitoring_CFLR"). Over 50% (n=13) of the wildfires interacting with fuels treatments were within 3 miles of Deschutes County urban growth boundaries. Additionally, all but 1 of the wildfires were with 3 miles of a structure. All of the fuel treatments with which these wildfires interacted were accomplished in the past 10 years, and 70% (n=16) were accomplished in the past 5 years. These 23 wildfires were extinguished quickly with a rapid and robust suppression response due to the close proximity to highly valued resources and assets. One incident was contained at 8.5 acres and all other incidents were contained and controlled at less than ½ acre.

The strategic approach to hazardous fuel treatment within the CFLR landscape has been to focus activities in close proximity to neighborhoods and communities. This approach has resulted in a more historic fuel composition surrounding the urban areas of Bend and Sisters as well as the outlying subdivisions. The resulting fire behavior observed in these treatment areas prior to suppression actions is commonly low intensity ground fire.

The fuel treatment activities occurring within the CFLR landscape are planned in collaboration with the DCFP and the Collaborative's plant association group recommendations are taken into account when developing projects and outlining treatment approaches. Local government from both the City of Bend and the City of Sisters have recently evaluated and

addressed hazardous fuel conditions along the shared border with NFS land. Both of these entities are also currently engaged in planning future cross-boundary projects with the Forest.

FY23 Wildfire/Hazardous Fuels Expenditures

Category	\$
FY23 Wildfire Preparedness*	\$694,822 (CFLR Acres/Forest Acres)
FY23 Wildfire Suppression**	\$1,597,469 (CFLR Fires/Forest Fires)
FY23 Hazardous Fuels Treatment Costs (CFLN, CFIX)	\$266,861
FY23 Hazardous Fuels Treatment Costs (other BLIs)	\$878,760

* 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")

Due to a lack of lightning storms impacting the Central Oregon region, the 2023 fire season represented a drastic departure from the 10- year average natural ignitions on the Deschutes NF. This reduced the percentage of suppression costs that could be associated with wildfires occurring in wilderness and other remote portions of the Forest. Human-caused ignitions persisted, especially in heavily utilized areas on the Forest close to communities. There were 39 ignitions within the CFLR boundary in FY23 (similar to 45 ignitions in FY22), representing nearly one-third of the wildfires occurring on the Forest in 2023. This causes the calculation for Wildfire Suppression expenditures to increase because of the greater share of fires within the CFLR boundary. At the same time, it is acknowledged that all 39 fires were contained within the first initial attack shift. The largest fire was less than 10 acres, and 38 of the fires were less than 1 acre. Only 12 fires grew beyond a tenth of an acre (the smallest fraction generally reported). Initial attack successes translate to a significant cost savings to the agency and to our local and state government partners. The cost associated with mobilizing a Complex Incident Management Team would eclipse the entire preparedness and suppression budgets represented in the table above.

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.

Ecological goals addressed in FY23 included treatments and monitoring efforts to address terrestrial invasives species, wetland restoration, soils improvement, and wildlife habitat. These were equally considered along with hazardous fuels reduction and commercial timber activities, as holistic restoration was emphasized in the DCFP 5-Year Extension of Funds Proposal and planned accomplishments.

Core Wildlife Habitat

In FY23, the Restoration Planning Subcommittee continued to focus on developing consensus-level recommendations for core wildlife habitat and the management of road and trail density to reduce disturbance and core habitat fragmentation. The recommendations were approved by the DCFP Steering Committee in the September 2023 meeting. The next phase of this work is developing a model to evaluate core habitat spatially on the Deschutes NF and surrounding land ownerships, and establish priority areas for retention. In partnership with The Nature Conservancy (TNC), extensive data on Level I roads was collected by Oregon State University and Central Oregon Community College students to inform the development of the core habitat model.

Wetland Restoration

FY23 CFLRP funding directly supported adaptive management and monitoring of the Lower Black Butte Swamp Restoration Project on the Sisters Ranger District, including growing and planting native, wetland vegetation and assessing groundwater changes through the installation of groundwater wells. Further, youth crews from the Heart of Oregon Corps helped to maintain previously installed Beaver Dam Analogue structures and a long-term effectiveness monitoring program was established.

Invasive Species

CFLRP funding has been invested in treating invasive plants on the Deschutes NF for over a decade. Invasive plants have far-reaching ecological impacts to native plant and animal populations, soil conditions, and biodiversity. The total acreage of invasive sites across the CFLR landscape has increased over time, but a substantial number of sites have smaller population sizes (due to repeated treatments) and there are fewer new sites discovered. Treatments are typically focused along travel corridors and waterways. In FY23, monitoring plots were established away from the highly disturbed roadways and other travel impacted areas to accurately represent the level of invasive plant populations throughout the CFLR landscape as well as the impacts of thinning, burning, or other combinations of forest treatments that have occurred within the last 15 years.

Forest Structure, Composition, and Ecological Function

The Monitoring and Adaptive Management Subcommittee visited treated stands to address Collaborative and community concerns that the Forest Service was harvesting big trees in ponderosa pine and mixed conifer stands, inconsistent with the DCFP Zones of Agreement for these plant association groups. The ecological underpinnings of these concerns include structural habitat components critical for listed species (I.e. Northern spotted owl), historic range of variability (HRV), and impacts to soil moisture and stand health.

A series of monitoring field trips found no evidence that the Forest Service removed any big trees in areas managed under the Eastside Screens (which has a clear 21" diameter limit). Within the range of the Northern spotted owl managed under the Northwest Forest Plan it was determined that on the ground actions followed the silvicultural prescriptions consistent with the DCFP Zones of Agreements and big trees were appropriately harvested. Some trees over 21" (mostly grand fir) were removed in the Lex Vegetation Management Project, but this was also consistent with DCFP recommendations and Dr. Andrew Merschel's site-specific research (to shift the dominant overstory to ponderosa pine in alignment with HRV). Concerns remain about mixed conifer treatments within the Northwest Forest Plan impacting Northern spotted owl.

In addition, concerns about soil moisture were raised at all three summer meetings. Some argued that thinning trees dries the soil by making it more accessible to sunlight and wind. Others noted that this may be accurate as it relates to

the first few centimeters of the soil profile, but deeper soil moisture available to the root systems of well-established trees is influenced by stand density and composition. Spatial heterogeneity was also discussed with respect to gap sizes and orientation in forest stands which can impact snow accumulation, moisture retention, and soil moisture recharge. Collectively, these ecological concerns will be integrated into the Monitoring and Adaptive Management Subcommittee's Plan of Work for 2024.

6. Socioeconomic Goals

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

The shared socioeconomic goals of the DCFP and Deschutes NF include enhancing community safety through WUI treatments, supporting a sustainable outdoor recreation economy through enhancing forest health and resilience, ensuring forest treatments address a multitude of social values (such as wildlife habitat and community drinking water), and creating and maintaining jobs in the forest products industry. In FY23, CFLRP funding, matching federal allocations, partner in-kind funding, and volunteer hours targeted activities for forest health improvement, hazardous fuels reduction, trail restoration, herbicide treatments for noxious weeds, wetland restoration, ecosystem monitoring, and job training. These activities directly and indirectly contributed to positive socioeconomic outcomes locally and in surrounding counties.

As stated in our 2010 Project Extension Proposal, healthy forests are the backdrop for a significant outdoor recreation and tourism industry in Central Oregon and the immense use of the Deschutes NF is, in part, a major driver of the over \$1 billion in direct tourism economic impacts in Deschutes County annually. The restoration activities that contribute to healthy forest conditions also have a major impact in the region. This past fiscal year, equipment intensive work included brush mastication and mowing of live hazardous fuels, while labor intensive work included pre-commercial hand thinning of dense forest stands and associated piling of thinning slash. Although these activities do not yield commercial products, there are financial benefits for the local economy through services and industries contractors use while working on restoration projects.

FY23 Timber Sales Sold:

The Sage DxP and Fish DxP Timber Sales within the CFLR boundary were sold, amounting to a combined volume of 14,898.01 CCF of sawtimber and low value material. The Sage DxP Timber Sale (which contains sawtimber and non-saw timber products) was awarded to Gilchrist Forest Products LLC (GFP). GFP owns the lumber mill in Gilchrist, Oregon in Northern Klamath County. GFP specializes in quality dimensional pine wood products and they provide good paying jobs to the local area by directly employing 150 employees. Logs delivered to the mill are supported by loggers, log truck drivers, fuel filling stations, diesel mechanics, heavy equipment dealers, pick-up truck dealers, tire shops, grocery stores, restaurants and motels all throughout Central Oregon.

Fish DxP Timber Sale was awarded to T2 Inc. in FY23. T2 Inc. is located in Sweet Home, Oregon approximately 2 hours from the Deschutes NF. T2 Inc. employs approximately 30 employees and specializes in forest thinning, chipping and maximizing utilization of biomass so that there is minimal waste of low value material and very little residue in the forest that would need to be burned once the project has been completed. Sawtimber from T2 timber contracts are trucked to local mills for processing into lumber and the smaller diameter low value material is manufactured into clean chips for

paper production, bark and shavings. T2 Inc. is also an integral restoration partner in that it directly and indirectly supports local economies.

FY23 Active Timber Sale Contracts

The removal of sawtimber and small diameter low value trees removed in active timber sales were a commercial biproduct of forest health improvement and hazardous fuels reduction activities. Low value material was removed and utilized for chips to make particleboard, cardboard, paper and for post and pole manufacturing. There were no small diameter low value trees removed this year for green biomass. Sawtimber was utilized for dimensional lumber, plywood and veneer.

Results from the Treatment for Restoration Economic Analysis Toolkit (TREAT). For guidance, training, and resources, see materials on <u>Restoration Economics SharePoint</u>.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: 70%

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

Description	Project Percent
Equipment intensive work	36%
Labor-intensive work	60%
Material-intensive work	0%
Technical services	4%
Professional services	0%
Contracted Monitoring	0%
TOTALS:	100%

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

Jobs Supported/Maintained	Direct Jobs	Total Jobs	Direct Labor	Total Labor Income
in FY 2023	(Full & Part-	(Full & Part-	Income	
	Time)	Time)		
Timber harvesting component	59	91	5,830,155	7,835,838
Forest and watershed				
restoration component				
	10	20	743,013	1,346,167
Mill processing component				
	85	217	6,921,630	13,358,140
Implementation and				
monitoring	2	2	140,270	181,710
Other Project Activities	0	0	0	0

⁷ Addresses Core Monitoring Question #7

CFLRP Annual Report: 2023

Jobs Supported/Maintained in FY 2023	Direct Jobs (Full & Part- Time)	Total Jobs (Full & Part- Time)	Direct Labor Income	Total Labor Income
TOTALS:	155	331	13,635,068	22,721,855

• 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 with the TREAT Data. The total harvested volume came from the contract record document, and delivery points were confirmed with Timber Sale Administration personnel that oversee each contract

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).

Seven timber contracts and one commercial firewood contract operated within the CFLR boundary in FY23 and a total of 44,938.47 CCF of sawtimber and 8,744.5 of low value material was removed. The forest products generated from these contracts benefited several businesses in the forest products industry both in Central Oregon and surrounding counties. Forest products were delivered to the following facilities: 1) Roseburg Forest Products, Dillard OR. 2) Murphy Company, White City, OR. 3) Gilchrist Forest Products LLC, Gilchrist, OR. 4) T2 INC, Sweet Home, OR. 5) Quicksilver Contracting Company, La Pine, OR. 6) Douglas County Forest Products, Roseburg, OR. 7) Columbia Forest Products, Klamath Falls, OR. 8) Collins Products, Klamath Falls, OR. 9) Nippon Dynawave Packaging CO, Longview, WA. And 10) R&M Firewood, Redmond, OR.

The following small businesses that benefited from CFLRP related contracts for restoration service work in FY23 include:

- Deschutes Construction Corporation, DoT Certified Disadvantaged Business Enterprise, Small Business, Redmond, OR
- Ecosystems Management, INC, Small Business, La Pine, OR
- E-M Davis Development LLC, Self-Certified Small Disadvantaged Business, Small Business, Veteran Owned Business, Leaburg, OR
- Fremont Forest Systems, Hispanic American Owned Business, Minority Owned Business, Small Business, Independence, OR
- Patrick Environmental INC, Service-Disabled Veteran Owned Business, Small Business, Veteran Owned, Redmond, OR
- Ponderosa Timberland, INC, Hispanic American Owned Business, Minority Owned Business, Self-Certified Small Disadvantaged Business, Small Business, Medford, OR
- Quadel Industries Inc., Small Business, Coos Bay, OR

⁸ Addresses Core Monitoring Question #8

- Sunset Forestry, 8a Program Participant, Economically Disadvantaged Women Owned Small Business, Hispanic American Owned Business, Minority Owned Business, Self-Certified Small Disadvantaged, Small Business, Women Owned Small Business, Central Point, OR
- Wilson Herbicide Spraying, LLC, Women Owned Small Business, Self-Certified Disadvantaged, Economically Disadvantaged, Adel, OR

7. Wood Products Utilization⁹

Timber & Biomass Volume Table

Performance Measure	Unit of measure	Total Units
		Accomplished
Volume of Timber Harvested TMBR-VOL-HVST	CCF	44,938.47
Volume of timber sold TMBR-VOL-SLD	CCF	14,898.01
Green tons from small diameter and low value trees removed from NFS lands and made available	Green Tons	0
for bio-energy production BIO-NRG		

8. Collaboration

Please include an up-to-date list of the core members of your collaborative <u>if</u> it has changed from your proposal/work plan or last annual report (if it has not changed, note below).⁹ For detailed guidance and resources, see materials <u>here</u>. Please document changes using the <u>template</u> from the CFLRP proposal and upload to <u>Box</u>. Briefly summarize and describe changes below.

The DCFP Steering Committee Membership added several new members in key stakeholder seats for Community Wildfire Protection, Private Landowner, Research, State & Federal Agency, At Large and Tribal. More information about the DCFP Steering Committee members can be found at <u>Deschutes Collaborative Members | Deschutes Collaborative Forest Project.</u> Changes are highlighted in gray in the table below:

NAME	AFFILIATION	STAKEHOLDER SEAT
Glen Ardt	ODFW, Retired	At Large (3)
Pam Hardy		At Large (3)
Sally Russell	Former City of Bend Mayor	At Large (3)
Bob Madden	Former City of Bend Fire Chief	Community Wildfire Protection (1-2)
Kevin Moriarty	Deschutes County	Community Wildfire Protection (1-2)

⁹ Addresses Core Monitoring Question #11

Miller Conservation	
Consulting	Environmental (2)
Yiamist Ventures	Environmental (2)
Quicksilver Contracting	Forest Products Industry (2)
Gilchrist Forest Products	Forest Products Industry (2)
City of Bend	Local Government (2)
Deschutes County	Local Government (2)
Shanda Asset Management	Private Landowners (2)
Tumalo Lake Resort	Private Landowners (2)
	Recreation and Tourism (2)
Deschutes Trails Coalition	Recreation and Tourism (2)
Retired Professor from OSU	Researcher (2)
	Researcher (2)
US Fish and Wildlife	State/Fed Agency (2)
Oregon Department of	
Forestry	State/Fed Agency (2)
	Watershed and Water
Deschutes Land Trust	Resources (2)
Oregon Department of Fish	Watershed and Water
and Wildlife	Resources (2)
Confederated Tribes of the	
Warm Springs	Tribal (2)
	Tribal (2)
	Miller Conservation Consulting Yiamist Ventures Quicksilver Contracting Gilchrist Forest Products City of Bend Deschutes County Shanda Asset Management Tumalo Lake Resort Deschutes Trails Coalition Retired Professor from OSU US Fish and Wildlife Oregon Department of Forestry Deschutes Land Trust Oregon Department of Fish and Wildlife

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 DCFP has been engaged in multiparty monitoring since 2010 and developed an Ecological Monitoring Plan that was

finalized in March 2014. Multiparty monitoring field trips focus on implementation monitoring, generating dialogue around adaptive management opportunities, and enhancing the communication feedback loop between the collaborative and Forest Service in real time. While the DCFP does not have a formal adaptive management process our activities continue to evolve base on monitoring feedback and shared learning experiences. In December 2022, the DCFP stood up the Monitoring and Adaptive Management subcommittee with the charge to:

- Work with the Forest Service to verify they are getting the expected results from the signed the Zones of Agreement for plant association groups
- Identify opportunities for adaptive management to build trust with the Forest Service and the community, and integrity internally.

The DCFP Monitoring and Adaptive Management Subcommittee accomplished its 2023 work plan goals of hosting field trips to sites with large trees and discussing whether outcomes are what was expected by the Forest Service, and by the relevant project NEPA. Stakeholders from diverse groups attended these field trips including: Interested citizens, The Nature Conservancy, Shanda Management, Gilchrist Timber, Oregon Wild, Worthy Environmental, Deschutes County, Bend City Council, The Sierra Club, Central Oregon Landwatch, and the U.S. Fish and Wildlife Service.

Multiparty monitoring remains an effective tool to address concerns within the DCFP as well as a broader range of stakeholders. Although the subcommittee originally expected to engage in more rigorous quantitative testing, they ultimately agreed with several people who suggested that they host a series of field trips to better refine the questions before spending time and money on research that might not actually be required or useful. These efforts remained qualitative with a large component of background education throughout the year. Matching background education efforts to participant capacity and their available time as well expanding focus beyond immediate sight to whole stands, watersheds, and the DCFP landscape as a whole remains a challenge. Some actions proposed for 2024 based on stakeholder feedback include:

- Focus on educating DCFP stakeholders on the results of other key monitoring efforts (especially those as larger scales) that may inform stakeholders. These include Eastside Screens monitoring, forest health monitoring flights, public use of level 1 roads, and information from Sale Administration staff.
- Consider different formats to engage groups who were initially skeptical of the work and interested in monitoring but were not consistent participants.
- Refer some questions raised during multiparty monitoring to the Restoration Planning Subcommittee for consideration, including climate change adaption strategies.

The Forest Service helped to guide the FY23 field trips and provided useful information regarding past treatments with the aim of bolstering shared learning. We are currently working with TNC and the DCFP to finalize the Spatial Heterogeneity Pilot Project in 2024, an effort that will provide important insights into how silvicultural prescriptions and timber designation methods impact structural diversity and ecological function in a stand long-term.

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?

The annual report does not reflect any significant departures from the DCFP proposal in terms of the types of treatments. However, the addition of Joint Chiefs' and WCS funding focused within similar geography resulted in greater coordination needs to effectively implement the FY23 program of work. These additional funds also increased accomplishments for key activities like mechanical hazardous fuels reduction in WUI and the application of prescribed fire.

A key benefit of a having a CFLR project on the Forest is the predictability of funding to chart out treatments on a high priority landscape over a full 5 or 10-year period. This level of fiscal predictability was uncharacteristic of any other funding type in the National Forest System until the 2022 passing of the Bipartisan Infrastructure Legislation supporting the WCS. It affords us and our collaborative partners the time to refocus on strategic restoration issues and monitoring, as well as the space necessary to address and integrate all of the social and economic complexities associated with it. The significance of this benefit cannot be overstated as a 5- to 10-year timeline aligns with the realities of implementing holistic restoration over a large footprint in partnership with our collaborative and communities.

The FY24 Plan of Work reflects ongoing alignment with the DCFP 5-Year Extension of Funds proposal to complete outstanding restoration within the original footprint of the CFLR landscape. DCFP emphasis areas and collaborative activities for FY24 are currently being developed with input from Forest Service leadership.

Media Recap

Press Releases:

- October 31, 2022 Firefighters on the Deschutes National Forest Start Pile Burning Season
- November 15, 2022 <u>Bend-Fort Rock Ranger District Firefighters Conduct Pile Burning Operations West of Bend</u> and <u>Sunriver</u>
- November 17, 2022 <u>Sisters Ranger District Begins Hazardous Fuels Reduction Work</u>
- January 4, 2023 Bend-Fort Rock Ranger District Firefighters Continue Pile Burning Adjacent to Highway 97
- January 4, 2023 Sisters Ranger District Continues Hazardous Fuels Reduction Work
- January 9, 2023 Sisters Ranger District Conducts Pile Burning in Glaze Meadow Area
- January 18, 2023 Bend-Fort Rock Ranger District Firefighters Conduct Pile Burning Operations West of La Pine
- February 3, 2023 Bend-Fort Rock Ranger District Firefighters Igniting Piles on West Side of Highway 97
- April 6, 2023 <u>Discover Your Forest Presents Screening of The West is Burning Documentary and Panel Discussion</u> in <u>Sisters</u>
- April 26, 2023 <u>Deschutes National Forest Spring Prescribed Burning Season Starts Thursday</u>
- April 27, 2023 Bend-Fort Rock Ranger District and Sisters Ranger District Plan Prescribed Burns for Friday
- April 28, 2023 Sisters Ranger District Plans Prescribed Burn for Saturday
- April 29, 2023 Sisters Ranger District Plans Prescribed Burn for Sunday
- April 30, 2023 Bend-Fort Rock Ranger District Plans Prescribed Burn Along Paulina Lake Road Tomorrow
- May 10, 2023 Sisters Ranger District Plans Prescribed Burn for Friday along Hwy 242 West of Sisters
- May 12, 2023 Portion of Peter Skene Ogden Trail Closed During Mowing Operations
- May 16, 2023 <u>Discover Your Forest presents screening of The West is Burning Documentary and Panel</u> <u>Discussion in Bend</u>
- May 23, 2023 Prescribed Burning Planned on Bend-Fort Rock, Crescent and Sisters Ranger Districts Wednesday
- May 24, 2023 Prescribed Burning Continues on Bend-Fort Rock and Crescent Ranger Districts Thursday
- May 25, 2023 Prescribed Burning Continues on Bend-Fort Rock Ranger District Friday
- May 29, 2023 Bend-Fort Rock and Crescent Ranger Districts Resume Prescribed Burning Tuesday
- May 30, 2023 <u>Sisters Ranger District Plans Prescribed Burn Near Highway 20 Wednesday</u>
- July 17, 2023 <u>Two-Day Trail Closure on Ben's and Kent's Trails</u>

- September 26, 2023 <u>Discover Your Forest presents screening of The West is Burning Documentary and Panel</u> <u>Discussion in La Pine</u>
- September 26, 2023 Deschutes National Forest Plans Fall Prescribed Burn Season in Coming Days

Media Coverage:

January 10, 2023 – *The Bend Bulletin* <u>Forest Service has thinning projects down to a science on Bend's west side</u> April 27, 2023 – *Central Oregon Daily* <u>A 'critical tool': Central Oregon prescribed burn season is here</u> May 5, 2023 – *OPB's Think Out Loud* <u>Prescribed fire training in Central Oregon aims to make communities safer, forests</u> <u>more resilient to wildfires</u> May 16, 2023 – *The Sisters Nugget* <u>Fighting fire with fire</u> May 24, 2023 – *KTVZ* <u>C.O.'s prescribed burns bring smoke near and far, in a bid to reduce later danger, when fire season</u> <u>peaks</u> September 2023 – *Bend Magazine* <u>Smokey Bear's Legacy: Seeing the Future Forest, Not Just the Trees</u>

Products:

• <u>2023 Deschutes National Forest Spring Prescribed Burn Summary</u> Key Events:

Prescribed Burn Tour



On Friday, May 12, the Deschutes NF hosted a prescribed burn tour for elected officials, local stakeholders, partners and media on the SAFR 188 Prescribed Burn just west of Sisters adjacent to Hwy 242 & Edgington Road. The prescribed burn tour gave participants an opportunity to experience a prescribed burn from the operational briefing through ignitions. The tour increased awareness around Central Oregon's fire-adapted ecosystem, the planning behind the implementation of a prescribed burn and the process used to apply lowintensity fire to the landscape. Attendees included

members of the DCFP, City of Sisters Mayor, local municipal fire department leadership, and Deschutes County Commissioner Phil Chang.

The West is Burning Screening and Panel Discussion

Discover Your Forest, non-profit partner of the Deschutes NF, hosted three showings of *The West is Burning* documentary followed by a panel discussion with local fire practitioners and land managers in Sisters, Bend and La Pine. Attendees had the opportunity to learn about the need for increased pace and scale of wildfire risk reduction and forest health restoration while learning about the additional funding and opportunities we have on our landscape under the national Wildfire Crisis Strategy. Organizations including the DCFP, Oregon State Fire Marshal, Project Wildfire and other

community organizations provided resources during a tabling portion of the events. The three events had a total of approximately 240 people in attendance.

Visuals

Please paste here or <u>upload visuals</u> if available, including before/after photos, maps, monitoring graphics, etc.

• Photos uploaded in Box <u>"FY23 CFLRP Reporting Photos"</u>

Signatures

Recommended by (Project Coordinator(s)): /s/ Kristen McBride Approved by (Forest Supervisor(s)): /s/ Holly Jewkes Draft reviewed by (collaborative representative): /s/ Rod Bonacker



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 <u>CFLRP Common Monitoring Strategy</u> 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.

Skye Greenler, Regional Ecologist, has pulled together a very helpful document to summarize the how-to steps and considerations for responding to the required questions. Please read her summary first (<u>https://usfs.box.com/s/wl2ovt0dmjwvnzli4hw1m28youdcaidu</u>), before linking to the data in the BOX folder links below.

- Question 1: "What is the reduction in fuel hazard based on our treatments?" Andrew Myhra work with Regional Ecologist Skye Greenler see data here: **this box folder**.
- 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" Pete Johnston work with Skye Greenler and/or Max Wahlberg to address specific ecological departure analysis outputs to consider for wildlife habitat condition see Skye's data here: this box folder.
- 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?" **Mike Crumrine** work with Skye Greenler on this response. See data here: **this box folder**.
- 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?" (Already answered in TREAT question in annual report template above)
- 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?" (Already answered in report template above)

- Question 11: "Who is involved in the collaborative and if/how does that change over time?" (Already answered in report template above)
- 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?" (Already answered in report template above)

The tables in the section below are copy/pasted from the suggested monitoring tracking <u>templates</u> 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?" (Reported Annually)

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

IFTDSS Auto- 97 th 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	20,235 ac	43,337 ac	150,172 ac	23,748 ac	7,996 ac	9,562 ac	2,488 ac
model (Baseline under CMS)	7.9% of landscape	16.8% of landscape	58.3% of landscape	9.2% of landscape	3.1% of landscape	3.7% of landscape	1.0% of landscape
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 1. Fire intensity (predicted flame lengths) from IFTDSS

• 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.

The data above represent a new "baseline" for monitoring fire intensity as directed by the Region 6 Ecology Program, incorporating new classes to represent Flame Length based on the Landfire 2022 (LF22). The only significant (> 1 acre) natural disturbance in the CFLR landscape associated with LF22 that occurred after publication of Landfire 2020 was 7 acres of the Bull Springs Fire occurring in March of 2021. Overall, the landscape continues to trend toward NRV as a result of both initial restoration and maintenance of past fuel reduction treatments.

IFTDSS Auto-97 th crown fire	Watershed	Unburnable	Surface	Passive	Active Crown	Crown Fire
activity output by watershed	Name		Fire	Crown Fire	Fire	(combined)
Initial landscape model	North Unit	14,947 ac	63,038 ac	11,491 ac	5 ac	11,496 ac
(Basalina under CMS)	Diversion	(16.7%)	(70.4%)	(12.8%)	(0.0%)	(12.8%)
(Baseline under CIVIS)	Dam					
Initial landscape model	Whychus	3,087 ac	50,284 ac	10,004 ac	9 ac	10,013 ac
(Baseline under CMS)	Creek	(4.9%)	(79.3%)	(15.8%)	(0.0%)	(15.8%)
(Baseline under Civis)						
Initial landscape model	Deep	367 ac	40,068 ac	9,491 ac	6 ac	9,497 ac
(Basalina under CMS)	Canyon	(0.7%)	(80.2%)	(19.0%)	(0.0%)	(19.0%)
(Baseline under Civis)						
Initial landscape model	Tumalo	468 ac	16,168 ac	10,468 ac	20 ac	10,488 ac
(Pasalina under CMS)	Creek	(1.7%)	(59.6%)	(38.6%)	(0.1%)	(38.7%)
(Baseline under Civis)						
Initial landscape model	Mckenzie	127 ac	9,156 ac	1,550 ac	11 ac	1,560 ac
(Pasolino under CMS)	Canyon	(1.2%)	(84.4%)	(14.3%)	(0.1%)	(14.4%)
(Baseline under CIVIS)						
Initial landscape model	Fall River	458 ac	7,600 ac	2754 ac	5 ac	2759 ac
(Pasolino under CMS)		(4.2%)	(70.3%)	(25.5%)	(0.0%)	(25.5%)
(Baseline under CIVIS)						
Initial landscape model	Charleton	474 ac	1,093 ac	2,262 ac	4 ac	2,267 ac
(Pasolino under CMS)	Creek	(12.4%)	(28.5%)	(59.0%)	(0.1%)	(59.1%)
(Baseline under CIVIS)						
Initial landscape model	Lower Little	307 ac	1,582 ac	232 ac	0 ac	232 ac
(Pasalina under CMS)	Deschutes	(14.5%)	(74.6%)	(10.9%)	(0.0%)	(10.9%)
(Baseline under Civis)	River					
Initial landscape model	Lower Dry	0.0 ac	3.1 ac	.2 ac	0.0 ac	0.2 ac
(Baseline under CMS)	River	(0.0%)	(93.1%)	(6.7%)	(0.0%)	(6.7%)
Landscape model 2	NI / A					
(Second year of CMS)	IN/A	N/A	N/A	N/A	N/A	N/A
N/A in first reporting 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.

The data above represent a new "baseline" for monitoring crown fire activity as directed by the Region 6 Ecology Program, utilizing HUC10 watershed to delineate new project sub-areas as opposed to the previous utilized fireshed boundaries. Crown fire activity is based on the Landfire 2022 (LF22) and the CFLR landscapes continues to trend toward NRV as a result of both initial restoration and 1,826 acres of final treatment in FY23 involving 1,618 acres of underburning.

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

There are no additional monitoring results for FY23. The 2020 "DCFP 10-Year Monitoring Report: A Decade of Learning" document provides monitoring details demonstrating a reduction in extreme fire hazard class on 15% of the landscape.

The Deschutes NF is pursuing the development of 15-year Monitoring Report that incorporates Common Monitoring Strategy data and other project-specific data to characterize changes since the Deschutes Collaborative Forest Project landscape was selected under the CFLRP program in 2009. We expect to highlight long-term trends in fire behavior in that summary document.

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

No changes planned, we will continue to finalize and maintain treatment investments across the landscape.

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

For detailed guidance, training, and resources, see corresponding reporting template <u>here</u>. 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 1: Vegetation Departure

Succession Class Area (acres) & % total project area Early Development Mid Closed Mid Open Late Open Late Closed

OR

Table 2: Missed Fire Cycle
Fire Regime Group
Fire Regime /
(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)

OR

Table 3: Fragmentation MetricReport in acres and % of landscapeCondition RecoveringCondition MaintainedCondition Improved

OR

 Table 4: Ground Plot Extrapolation

 Report in acres and % of landscape

 Condition Recovering

 Condition Maintained

 Condition Improved

- 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.

If Region is reporting on indicator 2 (acres burned by wildfire and by prescribed burning annually), fill in this table:

Report in acres and % of total project area	Fire Regime I	Fire Regime II	Fire Regime III	Fire Regime IV	Fire Regime V
Suppression only fires					
Fires managed for multiple					
resource objectives					
Prescribed Fire					
Total Acres Burned					
Natural Range of Variation (NRV)					
Departure					

• 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.

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?" (Reporting frequency determined by Regional indicator)

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

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
White-headed	Project	Late Seral	84,549-	Current	NA	NA	NA	4,056 acres of
Woodpecker		Open:	95,824	acres: 3,145				commercial and
Habitat: Late		3,145		(4% of the				precommercial
Seral Open in		acres		low end of				thinning or low
Mixed Conifer -				the target				intensity burning
Eastside Dry,				range)				to create enhance
Ponderosa Pine -								or maintain open
Xeric, and Dry								canopied
Ponderosa Pine -								conditions.* (Acres
Mesic BpSs								combined for all
								Ponderosa
								vegetation types.
Potential Future	Project	Mid Seral	33,214-	Current	NA	NA	NA	*Same as above.
White-headed		Open:	41,180	acres:				
Woodpecker		Current	acres	32,117				
Habitat: Mid		Conditions		(97% of the				
Seral Open in		32,117		low end of				
Mixed Conifer -		acres		the target				
Eastside Dry,				range)				
Ponderosa Pine -								
Xeric, and Dry								
Ponderosa Pine -								
Mesic BpSs								

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

Deer - Winter	Project	Road	No more	NA	NA	NA	Closed 11.2 miles;
Range		Density	than 1-				Decommission
			1.25				17.3 miles
			miles/Sq				
			Mile				
Deer - Winter	Project	Shrub	No more	NA	NA	NA	2413 ac. of comm
Range		Cycling	than 2.0-				and pre-
			2.5% of				commercial
			landscape				thinning. 236 ac.
			treated				of low intensity
			annually				prescribed
							burning.
Deer - outside	Project	Road	No more	NA	NA	NA	Closed 67.8 miles;
winter range		Density	than 2.5				Decommission 3.5
			miles per				miles
			sq Mile				
Deer - outside	Project	Hiding	0.3	NA	NA	NA	4,825 ac. of comm
winter range		Cover					and pre-
							commercial
							thinning. 1,358
							ac. of low intensity
							prescribed burning

*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	Target Range	Value in Initial Year of CMS	Acres of Habitat Treated to Improve this Indicator
	Measure	0		

For the table or table(s) above:

White-headed woodpecker habitat is characterized in this report using coarse filter metrics in two broad categories: Ponderosa Pine Mid Seral Open and Ponderosa Pine Late Seral Open. White-headed woodpecker habitat is closely related to late seral, open canopied conditions with a reliance on large and old trees and snags with cavity and disease defects. This coarse filter approach to monitoring does not capture or track the fine filter habitat requirements for white-headed woodpecker and other cavity nesting species including large snags, dead wood and coarse woody debris on the forest floor. However, managing towards the appropriate balance of structural and seral classes across the landscape can be expected over time to produce conditions more likely to provide these important fine filter habitat characteristics. Mid seral open canopied conditions do not typically have the large tree component required for whiteheaded woodpecker habitat; however, those conditions are tracked here as they represent conditions with the potential to grow into the large size classes required in the future. Treatments that open up canopies in mid seral conditions and maintain those openings through prescribed fire provide opportunities for large tree development into the future and are therefore tracked here as a beneficial element for white-headed woodpecker. Overall, current conditions for ponderosa pine systems in the collaborative landscape are well below target conditions for late seral open conditions, with current conditions only representing 4% of the lowest end of the range of target conditions for this seral class. Mid seral open conditions are also below target amounts for this landscape, though they are approaching the low end of the target range (currently 97% of the target range).

Effects to mule deer are perhaps more nuanced, with some treatments having a negative impact, and others having a beneficial effect on mule deer habitat. Additionally, habitat components for mule deer vary in their importance to the species, based on seasonal use. Therefore, we assess the effects of treatments within and outside of winter range for mule deer.

Shrub cycling within winter range and hiding cover outside of winter range were considered, based on the metrics with the Deschutes National Forest Land and Resource Management Plan. Treatments included 2,413 acres of commercial and pre-commercial thinning and 236 acres of low intensity prescribed fire with the potential to improve forage for mule deer within winter range for mule deer. Other treatments within the CLFR project areas including: crushing of fuels, mastication, pile burning, etc. are anticipated to have a negative effect on the shrub component of the mule deer winter range These treatments totaled 1,761 acres. These treatments were implemented to meet critical fuel objectives to reduce the potential for wildfire on the Deschutes NF, targeted for areas critical for wildfire management. It's difficult to quantify these treatments as they aren't strictly additive or negative. For example, conducting an overstory thinning doesn't "produce" X acres of shrub habitat. However, overall, this indicator is trending further from the desired conditions as described in the Deschutes NF Land and Resource Management Plan by removing the shrub component on 1,761 acres while promoting increased shrub growth on 2,649 acres.

Outside of mule deer winter range, 4,825 acres of commercial and pre-commercial thinning and 1,358 acres of low intensity prescribed fire are expected to maintain hiding cover. Opening the overstory is expected to provide sunlight and reduce competition for resources for the understory vegetative communities, particularly in areas where canopy cover is below 40%. Again, mastication and crushing of fuels, pile burning, and other activities were implemented to achieve fuel reduction goals which would result in a reduction of hiding cover in non-winter range for mule deer. These treatments totaled 5,067 acres where the shrub component and small vegetation that would provide hiding cover being removed, and 6,183 acres expected to stimulate the understory. As a result, this indicator is trending further from the desired conditions as described in the Deschutes Land and Resource Management Plan.

Road closure and decommissioning of roads were included in project designs to improve core habitat and reduce the potential for disturbance and displacement of mule deer both in and outside of winter habitat. Within the Cabin Butte project, which is dominated by winter range, 11.2 miles of roads were closed and 17.3 miles were decommissioned. The Klone project, outside of mule deer winter range, also included 67.8 miles of roads closed and 3.5 miles decommissioned to increase core habitat. User created roads are a constant threat on a heavily recreated forest like the Deschutes and nearly impossible to quantify over a specified timeline. However, road closure treatments associated with project work has this indicator trending towards the desired condition.

Monitoring Question #4: "What is the status and trend of watershed conditions in the CFLRP area?" (Reported every 5 years)

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

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

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

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

Indicator Number	Indicator Name	Avg. Indicator Value	Date
1	Water Quality - Aquatic Physical (Weighted 30%)		
2	Water Quantity - Aquatic Physical (Weighted 30%)		
3	Aquatic Habitat - Aquatic Physical (Weighted 30%)		
4	Aquatic Biota - Aquatic Biological (Weighted 30%)		
5	Riparian/Wetland Vegetation - Aquatic Biological (Weighted 30%)		
6	Roads & Trails – Terrestrial Physical (Weighted 30%)		
7	Soils - Terrestrial Physical (Weighted 30%)		
8	Fire Regime or Wildfire - Terrestrial Biological (Weighted 10%)		
9	Forest Cover - Terrestrial Biological (Weighted 10%)		
10	Rangeland Vegetation - Terrestrial Biological (Weighted 10%)		
11	Terrestrial Invasive Species - Terrestrial Biological (Weighted 10%)		
12	Forest Health - Terrestrial Biological (Weighted 10%)		

- 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?" (Reported Annually)

Table 1.	Treatment	data for	all invasive	species:
----------	-----------	----------	--------------	----------

Treatment Action	Acres Treated ¹	Acres Monitored	Avg. "Percent Efficacy"	Acres Restored ²	Response of Desirable Species ³
Herbicide	4878.5	2015.4	85%	5781.9	N/A
Mechanical	1538.9	544.6	77%	1538.9	N/A

Total/Avgs: Acres treated – 6417.4, Average "percent efficacy" – 81%, Acres restored – 7,320.8

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.

Monitoring Results

Herbicide treatments continue to have a higher efficacy than mechanical treatments across all species. Acres restored provides a better insight into the effect of the treatments on the landscape. It reflects a trend of improvement within invasive species infestations. Acres restored refers to the gross project area, while acres treated refers to the net acres treated.

Success Stories

Although the total acreage of invasive sites across the CFLR landscape increased, a substantial number of sites have smaller population sizes. Most invasive plant treatment activities across the CFLRP are decreasing with few new discoveries. Biocontrol agents for spotted knapweed and Dalmatian toadflax continue to expand with the biocontrol agents for toadflax continuing to provide excellent control.

While invasive plants continue to be treated across the CFLR landscape, they more often occur along travel corridors and waterway as reflected in the common monitoring plots illustrated below in Table 2 and summary. Monitoring plots have been established away from the highly disturbed roadways and other travel impacted areas to accurately represent the impact of thinning, burning, or other combinations of forest treatments occurred within the last 15 years.

Challenges

Higher than average spring rainfall likely promoted an increase of germination in the seed bank and the discovery of more invasive plant sites puts more demand on resources. Even with additional funding provided through the CFLR, time and resources continue to be a challenge to getting all invasive species populations treated every year.

Plot Level Monitoring

In total, 100 circular plots were monitored from 6/5/2023 to 8/7/2023. Total percent cover for invasive plants, bare soil, and litter and duff were recorded at each 0.1-acre plot. Invasive plants were identified to species and ocular cover estimates were recorded for each plant. Past treatment types, plot center photos and location notes were also gathered to revisit plots on a 2-year cycle. There were 75 treated plots and 25 untreated plots. Invasives were found on 14 plots:

12 of which were treated (16% of treated plots), and 2 were untreated (8% of untreated plots). Plots were determined as treated if thinning, burning, or other combinations of treatments occurred within the last 15 years. Average invasive percent cover was calculated by species with a species-plot matrix in Microsoft Excel.

AVERAGE INVASIVE PLANT COVER



AVERAGE INVASIVE COVER % IN TREATED AND UNTREATED PLOTS

Species	Treated	Untreated	Total
			0.01
VETH	0.013	0	3
TRDU	0	0.02	0.02
BRTE	0.1	0.04	0.14
			0.17
TOTAL	0.113	0.06	3

APPENDIX: TARGET SPECIES

	USDA		On focal
	Plants		species list
Scientific Name	Symbol	Common Name	2023?
Acroptilon repens	ACRE3	Russian knapweed+	Y
Arundo donax	ARDO4	Giant reed	Y
Bassia scoparia	BASC5	Kochia	Y
Berteroa incana	BEIN2	Hoary alyssum	Y
Brachypodium sylvaticum	BRSY	False brome	Y
Bromus tectorum	BRTE	Cheatgrass; Downy brome	Y
Cardaria draba	CADR	Whitetop; Hoary cress	Y
Centaurea diffusa	CEDI3	Diffuse knapweed	Y
Centaurea nigrescens	CENI3	Meadow (Tyrol) knapweed	Y
Centaurea solstitialis	CESO3	Yellow star-thistle **	Y
Centaurea stoebe	CESTM	Spotted knapweed	Y
Centaurea virgata	CEVI	Squarrose knapweed+	Y
Ceratocephala testiculata	CETE5	Bur buttercup	Y
Chondrilla juncea	CHJU	Rush skeletonweed+	Y
Cicuta douglasii	CIDO	Western water hemlock	Y
Cirsium arvense	CIAR4	Canada thistle	Y
Cirsium vulgare	CIVU	Bull thistle	Y
Conium maculatum	COMA2	Poison hemlock	Y
Convolvulus arvensis	COAR4	Field bindweed	Y
Conyza canadensis	COCA5	Horseweed	Y
Cuscuta sp.		Dodder	Y
Cynoglossum officinale	CYOF	Houndstongue	Y
Cytisus scoparius	CYSC4	Scotch broom	Y

Daucus carota	DACA6	Wild carrot	Y
Elymus repens	ELRE4	Quackgrass	Y
Erodium cicutarium	ERCI6	Filaree redstem	Y
Euphorbia esula	EUES	Leafy spurge	Y
Euphorbia myrsinites	EUMY2	Myrtle spurge	Y
Hieracium aurantiacum	HIAU	Orange hawkweed	Y
Hydrilla verticillata	HYVE3	Hydrilla	Y
Hypericum perforatum	НҮРЕ	St. Johnswort	Y
Iris pseudacorus	IRPS	Yellow flag iris	Y
Isatis tinctoria	ISTI	Dyer's woad	Y
Iva axillaris	IVAX	Poverty sumpweed	Y
Lepidium latifolium	LELA2	Perennial pepperweed	Y
Leucanthemum vulgare	LEVU	Oxeye daisy	Y
Linaria dalmatica	LIDA	Dalmatian toadflax	Y
Linaria vulgaris	LIVU2	Yellow toadflax	Y
Ludwigia sp.		Water primrose**	Y
Lythrum salicaria	LYSA2	Purple loosestrife**	Y
Myriophyllum spicatum	MYSP2	Eurasian watermilfoil	Y
Nymphoides sp.		Yellow floating heart	Y
Onopordum acanthium	ONAC	Scotch thistle	Y
Peganum harmala	PEHA	African Rue	Y
Phalaris arundinacea	PHAR3	Reed canarygrass	Y
Phalaris arundinacea var. picta	PHARP	Ribbongrass	Y
Potentilla recta	PORE5	Sulfur cinquefoil+	Y
Salsola kali	SAKA	Russian thistle	Y
Salvia aethiopis	SAAE	Mediterranean sage	Y

Senecio jacobaea	SEJA	Tansy ragwort	Y
Solanum rostratum	SORO	Buffalobur	Y
Tamarix ramosissima	TARA	Saltcedar tamarix	Y
Tribulus terrestris	TRTE	Puncturevine	Y
Ventenata dubia	VEDU	Ventenata grass	Y
Verbascum thapsus	VETH	Common mullein	Y
Xanthium spinosum	XASP2	Spiny cocklebur	Y

Monitoring Questions #6: "How has the social and economic context changed, if at all?" (Reported every 5 years)

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

Indicators	Response for Initial Year of	Notes
	Common Monitoring	(Optional)
	Strategy	
"Population" most recent year available (tab 1, Forest Service report)		
"Percent of total, race & ethnicity" most recent year available (tab 11,	White alone –	
Forest Service report)	Black or African American -	
	American Indian -	
	Hispanic ethnicity -	
	Non-Hispanic Ethnicity -	
"Unemployment rate" most recent year available (tab 1, Forest Service		
report)		
"Per capita income" most recent year available (tab 1, Forest Service		
report)		
"Wildfire Exposure, % of Total, Homes" most recent year available (see	Homes Directly Exposed -	
Wildfire Risk report)	Homes Indirectly Exposed -	
	Homes Not Exposed -	
Add in additional indicators used as needed		

• 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?

(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?" (Reported every 5 years)

• 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.

(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 <u>here</u>. Please upload your completed assessment summary provided by the Southwestern Ecological Restoration Institutes <u>here</u> 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?

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