CFLR Project (Name/Number): Deschutes Collaborative Forest Project

National Forest(s): Deschutes National Forest

1. Match and Leveraged Funds:

a. FY19 Matching Funds Documentation

Fund Source – (CFLN/CFLR Funds Expended)	Total Funds Expended in Fiscal Year	
	2019	
CFLN19	\$429,395*	

This amount should match the amount of CFLR/CFLN dollars obligated in the FMMI CFLRP expenditure report. Include prior year CFLN dollars expended in this Fiscal Year. \$391,109 captured in Agency database of record.

Fund Source – (Funds expended from Washington Office funds (in addition to CFLR/CFLN) (please include a new row for each BLI))	Total Funds Expended in Fiscal Year 2019
NFHF	\$282,939

This value (aka "core funds" "in lieu of funds") should reflect the amount expended of the allocated funds as indicated in the program direction but does not necessarily need to be in the same BLIs or budget fiscal year as indicated in the program direction.

Fund Source – (FS Matching Funds	ching Funds Total Funds Expended in Fiscal Year	
(please include a new row for each BLI)	2019	
NFNF	\$691,223*	
CWKV	\$6,612*	
NFVW	\$17,820*	
RTRT	\$11,654*	
NFTM	\$1,169,319	

This amount should match the amount of matching funds in the FMMI CFLRP expenditure report, minus the Washington Office funds listed in the box above and any partner funds contributed through agreements (such as NFEX, SPEX, WFEX, CMEX, and CWFS) listed in the box below.

*These fund sources did not match gPAS amounts (i.e. NFHF), or they were not included in the upward reporting databases as CFLN match. The

Forest consolidated workplans in FY19 and smaller match amounts (i.e. CWKV, NFVW, RTRT) were not appropriately accounted for or tied to work conducted within the CFLRP landscape boundary.

Fund Source – (Funds contributed through agreements)	Total Funds Expended in Fiscal Year 2019
SCS2 (Title II)	\$20,479

Please document any partner contributions to implementation and monitoring of the CFLR project through an income funds agreement (this should include partner funds captured through the FMMI CFLRP reports such as NFEX, SPEX, WFEX, CMEX, and CWFS). Please list the partner organizations involved in the agreement. Partner contributions for Fish, Wildlife, Watershed work can be found in the WIT database.

Fund Source – (Partner In-Kind Contributions)	
DCFP Volunteer Time	\$28,847
DCFP Collaborative Travel Expenses	\$2,260
DCFP Collaborative Supplies and Equipment	\$711.50
Forest Volunteer Program	\$1,554,812

Total partner in-kind contributions for implementation and monitoring of a CFLR project on NFS lands. Please list the partner organizations that provided in-kind contributions.

Service work accomplishment through goods-for services funding within a stewardship contract (for contracts awarded in FY19)	Totals
Total <u>revised non-monetary credit limit</u> for contracts awarded in FY19	\$0.00

Revised non-monetary credit limits should be the amount in contract's "Progress Report for Stewardship Credits, Integrated Resources Contracts or Agreements" in cell J46, the "Revised Non-Monetary Credit Limit," as of September 30. Additional information on the Progress Reports is available in CFLR Annual Report Instructions document. Information for contracts awarded prior to FY19 were captured in previous annual reports.

b. Please fill in the table describing leveraged funds in your landscape in FY2019. Leveraged funds refer to funds or inkind services that help the project achieve proposed objectives but do not meet match qualifications.

Description of item	Where activity/item is located or impacted area	Estimated total amount	Forest Service or Partner Funds?	Source of funds
Spatial Diversity Pilot Study	Second growth ponderosa pine stands within and outside of the CFLRP boundary to compare effect of various timber designation methods on spatial variability	\$2,400.00	Partner Funds	OWEB Grant obtained by The Nature Conservancy (TNC)

(Optional) Additional narrative about leverage on the landscape if needed: The objective of the Spatial Variability Pilot Project was to provide a standardized and objective methodology for analyzing past treatments in ponderosa pine forest systems and their effect/influence on tree spatial pattern. This effort was conducted in response to feedback derived from multiparty monitoring with members of the DCFP Restoration Planning and Monitoring Subcommittees. To accomplish this, the DCFP partnered with TNC to develop a methodology that compared pre-treatment (LiDAR-derived) tree spatial pattern with post-treatment (PhoDAR-derived) tree spatial pattern to evaluate if silvicultural prescriptions were establishing a trajectory for forest stands to enhance spatial heterogeneity and ultimately greater ecological function (see Question #5 response below for more details).

2. Please tell us about the CFLR project's progress to date in restoring a more fire-adapted ecosystem as described in the project proposal, and how it has contributed to the wildland fire goals in the 10-Year Comprehensive Strategy Implementation Plan.

FY2019 Overview

FY19 Activity Description (Agency performance measures)	Acres
Number of acres treated by prescribed fire	2,185
Number of acres treated by mechanical thinning	788
Number of acres of natural ignitions that are allowed to burn under	
strategies that result in desired conditions	
Number of acres treated to restore fire-adapted ecosystems which are	670
maintained in desired condition	
Number of acres mitigated to reduce fire risk	2,185

Please provide a narrative overview of treatments completed in FY19, including data on whether your project has expanded the pace and/or scale of treatments over time, and if so, how you've accomplished that – what were the key enabling factors? **For projects finishing their tenth year**, if you have any additional insights from your cumulative work over the course of the project please share those here as well.

The Deschutes Collaborative Forest Project (DCFP) landscape provides countless benefits to the residents of Central Oregon and the region more broadly, including clean air and water, a strong sense of place and a robust economy based on forest products, tourism, and recreational opportunities. The DCFP landscape also captures a considerable portion of the Deschutes National Forest (NF) Wildland-Urban Interface (WUI) (65%) and numerous high use recreation areas. Nearly all of the DCFP landscape treatments occur in areas classified as high to very high risk on the Wildfire Hazard Potential map, as the majority of acreage within the landscape is only one to two burn periods away from the communities of Bend, Sisters, Sunriver and Black Butte Ranch. In 2019, treatments were again focused around the communities of Bend and Sisters. Bend is ranked 4th and Sisters is 20th on "The 50 communities in Oregon with Greatest Cumulative Housing-Unit Exposure to Wildfire", http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf. Approximately 110,000 people permanently call central Oregon home. In addition, a 2017 Visit Bend survey shows over 3 million visitor trips to the Bend area annually, with numbers steadily increasing in the summer months.

In FY19, several prescribed fires were conducted within and adjacent to the DCFP landscape in collaborative partnership with the Oregon Department of Transportation, the City of Bend Fire Department, Sisters Camp Sherman Fire Department, Oregon Department of Forestry and TNC. FY19 also marked the fourth year of implementation for the Shevlin Park Prescribed Fire Project. To date, 555 acres of cross-boundary prescribed burning has been completed and 278 of those acres are in Shevlin Park, a popular park in the northwest part of Bend. The remaining 277 acres were located within the DCFP landscape adjacent to surrounding the park. The project is being completed under a participating agreement between the USFS and the Bend Park & Recreation District using Wyden Amendment authorities. Objectives of the project are to return fire to the ponderosa pine forests surrounding Bend, reduce fuels in the wildland urban-interface and provide a place for the public to learn about the important role of fire in dry pine forest ecosystems. We have completed 90% of the project with a single burn unit remaining within the park boundary.

The cost per acre cost of implementing a WUI prescribed burn is usually 3-4x higher than a non-WUI prescribed burn. However, as more prescribed fires are implemented and public understanding increases through outreach efforts of the DCFP Collaborative, there has been a notable cost reduction. As an example, we conducted a reentry into the first prescribed burn unit within West Bend Project Area, a project adjacent to the urban growth boundary of the community of Bend. The first entry prescribed underburn conducted in 2014 resulted in an exceedance of the NAAQS 24hr PM2.5 standard and received numerous negative public comments. The 2019 reentry required considerably less staffing and resulted in a minimal 1 hour smoke intrusion, resulting in only positive public support. As treatments continue across the landscape the pace and scale of utilizing fire as a both a final restoration and maintenance mechanism is expected to increase with good results.

Deschutes NF staff continue to participate in the DCFP Prescribed Fire Subcommitte, which actively works to enhance messaging, network maps, and interactive tools to further garner community support for prescribed fire. These efforts have significantly furthered social license for hazardous fuels and restoration efforts locally while also contributing to the ability to increase the pace and scale of prescribed fire in critical WUI areas through recently revised reduced smoke management standards and community response plan development.

Please provide visuals if available, including maps of the landscape and hazardous fuels treatments completed, before and after photos, and/or graphics from fire regime restoration analysis completed locally. You may copy and paste these below or provide a link to a website with these visuals.

Expenditures

Category	<u>\$</u>
FY2019 Wildfire Preparedness ¹	\$709,719
FY2019 Wildfire Suppression ²	\$619,059
The cost of managing fires for resource benefit if appropriate (i.e. full suppression versus managing)	N/A
FY2019 Hazardous Fuels Treatment Costs (CFLN)	\$139,951
FY2019 Hazardous Fuels Treatment Costs (other BLIs)	\$733,189

How may the treatments that were implemented contribute to reducing fire costs? If you have seen a reduction in fire suppression costs over time, please include that here. *For projects finishing their tenth year*, if you have any additional insights from your cumulative work over the course of the project please share those here as well.

A significant number of fire starts regularly occur within the DCFP landscape, and there is a history of fires that have burned structures and threatened public safety (i.e. 2017 Millie Fire). In FY19, there were approximately 48 fires that started within the CFLRP landscape. All fires were suppressed during initial attack. The Deschutes NF has inferred that continued investment in proactive, fuels reduction activities (especially prescribed burning) will lead to initial attack success, potential for alternative management strategies, and ultimately a decrease in suppression costs. However, no formal assessments or reports have been completed to evaluate the cost savings.

When a wildfire interacts with a previously treated area within the CFLR boundary: Each unit is required to complete and submit a standard fuels treatment effectiveness monitoring (FTEM) entry in the FTEM database (see FSM 5140) when a wildfire occurs within or enters into a fuel treatment area. For fuel treatment areas within the CFLR boundary, please copy/paste that entry here and respond to the following supplemental questions. Note that the intent of these questions is to understand progress as well as identify challenges and what didn't work as expected to promote learning and adaptation.

The FTEM database contained monitoring information for six wildfires that interacted with fuels treatments within the CFLR landscape boundary in FY19 (see Appendix A). Numerous WUI interface burns also occurred in close proximity to or on non-federal lands that were supported by the Bend, Sunriver, and Sisters Camp Sherman Fire Departments. The HVRAs within the DCFP landscape are characterized by variable socioeconomic and ecological resources, thus all fires were quickly extinguished (attributable in part to ongoing fuel reduction treatments). As anticipated, the treatments slowed fire spread and decreased fire behavior to allow for direct suppression, leading to successful initial attack in the WUI during the busy summer recreation and tourism season. We have observed the effectiveness of wildfire/fuel treatments interactions over the past several years, underscoring for us the importance of continuing to invest limited resources in the WUI and the importance of maintaining treatments over time. FTEM uses the most recent treatment in its reporting protocols. Where interactions occurred, treatment costs ranged from \$150-\$244/acre, primarily completed using NFHF matching funds.

¹ Include base salaries, training, and resource costs borne by the unit(s) that sponsors the CFLRP project. If costs are directly applicable to the project landscape, describe full costs. If costs are borne at the unit level(s), describe what proportions of the costs apply to the project landscape. This may be as simple as Total Costs X (Landscape Acres/Unit Acres).

² Include emergency fire suppression and BAER within the project landscape. Describe acres of fires contained and not contained by initial attack. Describe acres of resource benefits achieved by unplanned ignitions within the landscape. Where existing fuel treatments within the landscape are tested by wildfire, summary and reference the fuel treatment effectiveness report.

In 2019, there were 48 wildfires total in the CFLRA landscape affecting only 20 acres. These were all suppressed at less than one acre with the exception of the 10-acre Tumalo Creek fire, located immediately adjacent to the western border of the CFLR boundary and within a high risk zone within the Bend Municipal Watershed. The URSUS and BMW project areas are directly adjacent but have not been fully completed. Weather was conducive to successful initial attack but under differing conditions those untreated units would have been critical to the protection of the Bend Municipal Watershed. No significant suppression costs were derived from fires and there was no post-fire BAER rehabilitation necessary. The CFLR landscape comprises 14% of the total protection zone of the Deschutes NF.

Community participation and engagement has been a leading principal for all projects within the CFLR landscape, and the emphasis over the past 2 years has been centered on the benefits of prescribed fire. The DCFP Prescribed Fire Subcommittee continued to be a critical collaboration space surrounding efforts to increase pace and scale of prescribed fire treatments across the Deschutes NF. In FY19, we completed another round of prescribed fires on Bend Parks and Recreation Lands as part of a strategic fuels break on the west side of Bend with great success. During this burn we also hosted two public tours during the operation to assist community leaders in understanding the operational and ecological considerations that go into prescribed fire implementation. In addition, the 2019 TREX program hosted 30+ practitioners/students from around the country, teaching the principals of fuels planning and implementation in the operational environment

(http://deschutescollaborativeforest.org/forest-restoration-work/prescribed-burning-deschutes-forest-bend/).

3. What assumptions were used in generating the numbers and/or percentages you plugged into the TREAT tool? Information about Treatment for Restoration Economic Analysis Tool inputs and assumptions available here.

FY 2019 Jobs Supported/Maintained (FY19 CFLR/CFLN/ WO funding):

FY 2019 Jobs Supported/Maintained	Jobs (Full and Part-Time) (Direct)	Jobs (Full and Part-Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	11	16	962,312	1,316,626
Forest and watershed restoration component	1	1	30,960	50,516
Mill processing component	17	36	1,135,886	2,008,578
Implementation and monitoring	8	11	394,017	508,404
Other Project Activities	0	1	20,943	31,268
TOTALS:	38	65	\$2,544,118	\$3,915,392

FY 2019 Jobs Supported/Maintained (FY19 CFLR/CFLN/ WO and matching funding):

FY 2019 Jobs Supported/Maintained	Jobs (Full and Part- Time) (Direct)	Jobs (Full and Part- Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	36	49	3,036,087	4,153,943
Forest and watershed restoration component	1	1	31,220	50,860
Mill processing component	54	115	3,583,710	6,337,045
Implementation and monitoring	29	39	1,448,195	1,868,622
Other Project Activities	1	1	26,901	41,044
TOTALS:	121	206	\$8,126,113	\$12,451,514

4. Describe other community benefits achieved and the methods used to gather information about these benefits. How has CFLR and related activities benefitted your community from a social and/or economic standpoint? (Please limit answer to two pages).

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
Project partnership composition	Many DCFP projects and initiatives highlight the diversity of partners working collaboratively to support this work in Central Oregon. Those include: DCFP Steering Committee and Subcommittees, including 28 active stakeholder individuals and organizations including the Central Oregon Prescribed Fire, Smoke, and Public Health Collaborative bridging forest and fire managers; air quality regulators, and local and state public health agencies; and the Central Oregon Prescribed Fire Training Exchange, which brought together 31 participants from 4 countries and 15 organizations. Furthermore, both the DCFP Steering Committee and Prescribed Fire Subcommittee complete strategic planning processes this year, both of which had diverse representation from both DCFP stakeholders and USFS staff, creating a shared vision for the coming years of DCFP collaboration. Cultivating and maintaining diverse membership is a success of DCFP, ensuring our collaborative solutions are robust and socially supported because they integrate a multitude of perspectives and values. Diverse membership also enhances and expands our social capital, increasing connectedness and understanding among DCFP participants who otherwise would be unlikely to work together toward a common vision. Anecdotally, members report developing trust-based relationships that support	See Central Oregon TREX recap below.
	effective working relationships inside and outside of DCFP.	
Social media analytics	Analytics • 53% female, 47% male audience with our largest viewerships between the age of 35-44 and 55+,	New this year was a range of DCFP prescribed fire outreach videos used on social media and local media outlets to answer frequently asked

	but we continue to see an increase	questions and address common
	in the 25-34 age range.	misconceptions regarding
	 Followers reside primarily in 	prescribed fire planning and
	Deschutes County with a small	implementation. Those videos are
	following from Eugene, Portland	all available on the DCFP YouTube
	and Corvallis.	channel.
	 Website has recorded 35,430 	<u>charnel</u> .
	visitors since January 1, 2018, which is a 30% increase from the	
	previous year.	
	1 -	
	89% of our visitors are visiting our website for the first time.	
	MailChimp email marketing has	
	1,225 active subscribers with an	
	average 34% open rate from	
	recipients.	
	• Facebook has 1,531 total page	
	likes with an average of 8,500	
Madia citations	people reached weekly. The DCFP continues to use both	Soo Madia Bassa in Overstian #12
Media citations		See Media Recap in Question #13
	paid and earned media as a primary	and PDF of 2019 DCFP Outreach
	community outreach and	Report.
	engagement strategy. This includes stories we work actively to	
	generate, as well as media attention	
	focused on events we coordinate.	
Public input in political processes	The DCFP, Central Oregon	See PDF of City of Bend Prescribed
abile input in political processes	Prescribed Fire, Smoke, and Public	Fire, Smoke, and Public Health
	Health Collaborative, City of Bend,	Community Response Plan.
	and Deschutes County worked	Community Nesponse Fiam
	together to craft a Prescribed Fire	
	Smoke Community Response Plan	
	for the City of Bend airshed, which	
	was submitted to the Oregon Dept.	
	of Forestry and Department of	
	Environmental Quality. If approved,	
	the plan would grant the Deschutes	
	NF additional latitude for short-	
	duration smoke impacts from	
	prescribed fire in high-priority	
	treatment areas, such as the WUI.	
Community support for relevant	DCFP repeated our 2013 public	See PDF of 2019 DCFP Public
initiatives	opinion survey to refresh our	Opinion Survey Results by DHM
	understanding of local attitudes and	Research.
	beliefs about fire-adapted forest	
	restoration. The results suggest	
	strong ongoing support for all stages	
	of forest restoration (thinning,	
	mechanical fuels reduction, and	
	prescribed fire) and belief in the	
	importance of continued work.	

2019 Central Oregon Prescribed Fire Training Exchange Summary

For the 5th year, the Deschutes NF in partnership with TNC, the Upper Deschutes Fire Learning Network, and the DCFP hosted the Central Oregon Prescribed Fire Training Exchange (COTREX) from April 29 to May 10, 2019. COTREX is made

possible through a Supplemental Participating Agreement tiered to the national Fire Learning Network Master Agreement. The training brought together 40 participants and cadre from 10 states and 4 countries representing 3 municipal fire/fire protection districts, 4 NGOs, 2 universities, 1 county forestry department, 2 state agencies, 3 Bureau of Indian Affairs units, 3 Bureau of Land Management districts, 1 USFS Regional Office, and 6 National Forests. Collectively, COTREX participants received 90 position taskbook training assignments while supporting local forest and fire professionals to complete 1,890 acres of prescribed fire on the Deschutes NF, improving fire-adapted forest health and resilience, as well as community and firefighter safety.

Over the past 5 years, COTREX has provided integrate ecological, social, and operational training to 146 participants (including 288 taskbook training assignments) from 19 states, 5 countries and a wide range of organizations, from federal, state, tribal land/fire management agencies, nearly two dozen NGOs, universities, rural and municipal fire departments, and private contractors. Working alongside local fire professionals, COTREX has accomplished 6,630 acres of prescribed fire and used those treatments to catalyze community outreach and engagement in a wide variety of formats, from open houses, social media campaigns, print media, earned media, paid PSA campaigns on local television and movie theaters, and live fire field tours. See Media Recap in Question #13.

5. Based on your project monitoring plan, **describe the multiparty monitoring process.** You may simply reference your <u>ecological indicator reports here</u> if they adequately represent your multiparty monitoring process. <u>If</u> further information is needed, please answer the questions below.

What parties are involved in monitoring, and how?

DCFP's monitoring efforts include biophysical monitoring and multiparty implementation monitoring. Our biophysical monitoring plan was developed in consultation with Mamut Consulting and TNC. We identified biophysical indicators (a subset of which are required ecological indicators for national CFLR monitoring) that would allow us to answer key questions related to the effectiveness of restoration efforts, including watershed and forest health indicators. To keep costs low and ensure data collection, we selected indicators that are regularly collected by FS Staffs and/or local partners. We worked with Mamut Consulting at the 5-year CFLRP mark to coordinate the collection, synthesis and analysis of these biophysical indicators, which is currently being repeated in FY19 to for 10-year DCFP and CFLR monitoring.

Our multiparty monitoring efforts engage the collaborative and interested members of the public in pre- and post-implementation field trips to discuss projects before and after they have been executed. Pre-implementation field trips create a forum for participants to cross-walk DCFP's recommendations with the FS's proposed treatments in specific projects and to discuss with FS staff the intentions behind their recommendations as well as to identify any issues of concern prior to implementation. Post-implementation field trips offer an opportunity for the Forest to showcase what has been completed and to share any challenges encountered during implementation as well as how these were addressed.

DCFP's multiparty monitoring field trips consistently engage a diverse breadth of stakeholder interests and membership across our Steering Committee, Adaptive Management and Implementation Subcommittee, Restoration Planning Subcommittee, and Prescribed Fire Subcommittee. This includes environmental interest, loggers and timber industry representatives, recreational interests, education and research, city and county government, fire and fuels reduction, and other interests.

What is being monitored? Please briefly share key broad monitoring results and how results received to date are informing subsequent management activities (e.g. adaptive management), if at all.

Our biophysical monitoring is primarily focused on effectiveness monitoring (or proxies thereof) and encompasses a breadth of indicators including aquatic ecosystem health and watershed function, invasive plants, forest vegetation departure and fire hazard reduction, and wildfire habitat restoration and function. Our multiparty monitoring is primarily focused on implementation monitoring, utilizing field trips designed to build trust and ensure that DCFP's recommendations are being implemented on the ground. The field trips involve engaging the collaborative in the following:

- Refreshing their recollection of the purpose, need, and landscape context of the project
- Reviewing the science and data that supported DCFP's recommendations
- Reviewing the desired future condition for the project
- Reviewing the DCFP's relevant recommendations at the landscape, project, and stand level
- Hearing from the Forest about the issues they are facing in the project: wildlife, riparian concerns, recreational use, proximity to nearby communities, etc.
- Cross-walking the Forest's proposed treatments to the desired future condition and DCFP's recommendations
- Identifying any concerns and clarifying and resolving them

This process has been extremely helpful in recent years in surfacing and opening dialogue regarding concerns in the Lex and Kew Projects, which are the first projects with includes significant acres of dry and moist mixed-conifer forest habitat. The key issues that surfaced related to:

- 1. Retention of large trees versus retention of old trees and the competing objective of restoring forest structure and tree species composition consistent with historical range of variability and resilient to future climatic changes.
- 2. Managing roads and trails (both system and user-created) to reduce ecological impacts and improve wildlife habitat function.
- 3. The size of group openings in treatments to shift tree species composition, specifically towards increasing early seral, fire-tolerant trees.

In FY19 the DCFP and Deschutes NF hosted a post-implementation field tour of the Ryan Ranch project, reviewing wetlands restoration efforts and discussing the challenges and successes of the project. We also conducted a pre-NEPA field tour of the Cabin Butte Project to discuss areas of overlapping values and objectives related to mule deer winter range, dry forest restoration, human disturbance, and fuels reduction treatments in the WUI. This effort surfaced an important set of issues that will become the focus of DCFP-DNF collaboration in the coming year.

Finally, the DCFP in partnership with the Deschutes NF and TNC, continues to work on a stand-level spatial variability pilot project, collecting drone-based, high-resolution photo-imagery data on treated dry forest stands. The data from Phase 2 of this project (see below) has been analyzed and presented to DCFP members and USFS staff to gather a set of lessons learned regarding prescriptions, marking guides, and designation methods that advance our shared objective of increasing within-stand spatial variability of trees. These results are now being used to inform Phase 3 of this project, which will involve the design, implementation, monitoring (quantitative and qualitative), and analysis of treatment outcomes in upcoming thinning units with explicit spatial variability objectives.

Phase 1: Methodology Development, Testing, and Refinement

- Objective: Provide a standardized and objective methodology to analyze restoration thinning in second-growth ponderosa pine stands and their influence on spatial pattern outcomes.
- Key question(s): How can we analyze within-stand spatial pattern of trees in an accurate, repeatable, and objective way to better understand/answer questions related to restoring fine-scale spatial pattern and linked dry forest ecosystem functions?

Phase 2: Retrospective Analysis of Past Treatments

- Objective: Analyze a range of recently thinned, second-growth ponderosa pine stands to assess spatial pattern outcomes from a range of restoration thinning treatments.
- Key question(s): Are recent restoration thinning treatments leading to more variable spatial
 pattern of trees within stands and setting dry forests on a trajectory to increase spatial
 variability over time? What can we learn from past treatments about the efficacy of different
 prescriptions and/or designation methods to achieve more spatial diversity/spatial
 heterogeneity within dry forest stands?

Phase 3: Adaptive Management Experiment in Upcoming Treatments

- Objective: Apply Methods developed in Phase 1 and lessons learned in Phase 2 to evaluate the
 efficacy of different designation methods used to implement a common dry forest restoration
 thinning prescription with explicit variable spatial pattern goals through different designation
 methods (cut-tree marking, leave-tree marking, designation by prescription, and hybrid
 approaches (designation by prescription plus limited marking).
- Key question(s): Do different designation methods lead to more diverse/more uniform stands when implementing similar prescriptions with explicit spatial variability goals? What variables are involved in determining the most effective and efficient approaches to designation? How do key variables (such as stand type, stand complexity, availability of FS marking crew, contractor experience, impact the efficiency and effectiveness of the various designation approaches used for implementing spatial diversity?) What are the costs, challenges and opportunities of different approaches to implementing spatial diversity?

What are the current weaknesses or shortcomings of the monitoring process? (Please limit answer to one page. Include a link to your monitoring plan if it is available).

Quality monitoring trips require a breadth of engagement by FS Staff across many departments. For example, it is often helpful to have FS staff available to address issues related to wildlife, silviculture, fuels, past treatment history, economics, and recreational issues within a particular project. Limited FS capacity and availability can challenge field trip implementation. This was a frequent issue in 2019, a year marked by the furlough and challenged agency budgets. DCFP continues to work with the FS to identify the most important topics to invest collaborative and FS time on via field trips and monitoring efforts.

Monitoring is time consuming and can seem less important to members than the initial development of recommendations. DCFP staff work diligently to call individual stakeholders from across all interest groups to ensure their participation in the multiparty monitoring field trips.

Monitoring conversations require collaborative members to retain and draw upon a great deal of information for a purpose that is distinct from the consensus decision process utilized in planning. Specifically, to participate effectively in monitoring discussions collaborative members must move away from their original positional stances and embrace the collective agreement reached by the group. Then they must hold the planned (or implemented) treatment up against that collective agreement and assess the degree to which it aligns with the group's agreements and is likely to lead to the desired future conditions. Such a conversation requires a good memory as well as emotional maturity. Many collaborative participants are comfortable comparing a planned treatment with their individual positional preference. They are less comfortable assessing how their individual positional preference is accommodated by a planned treatment and reflected in the group's agreements. The result is often that despite careful framing of the topics and reminders about the group's consensus-based agreements, monitoring field trips involve a great deal of rehashing old conversations and rearguing points that were agreed upon months before. This can be frustrating for those in attendance and may lessen the attractiveness of the field trips.

Additionally, it is challenging to reach consensus in the field. Whole participation in field trips is robust, not everyone can attend due to timing and the time commitment required. Those involved participate in multiparty monitoring field trips by sharing their individual concerns about a project and/or concerns about how the recommendations have been interpreted and applied. Others in the group may be very comfortable with how the recommendations are being applied. The result is a list of areas of concern from some members of the collaborative rather than an agreement on the part of all attending about whether they collectively support the project. When asked in the field whether they support the project, some individual stakeholders refrain from offering support, perhaps with the hope that if they hold out their concern will be resolved in a way that more closely reflects their individual positional stance. This is part of why it is vital

to have diverse participation on field trips of this kind to ensure that all voices are heard by the Forest so that counter balancing perspectives can be shared.

Despite these challenges, DCFP's multiparty implementation monitoring field trips are very productive in clarifying concerns among stakeholders and working through these concerns alongside our FS partners. We continue to follow-up on adaptive management opportunities, such as refining our recommendations on road and trail systems, for example, to more clearly describe the values of the group by specifically asking that roads and trails decommissioning be thoughtfully place so as to augment core habitat.

Our monitoring and adaptive management practices have led us to modify our process for engaging with the forest during implementation. We now have a process for communicating early and often as projects move toward draft EIS. Forest staff flag any issues of concern and collaborative members do the same. The Forest develops a "cross-walk" document that compares the Forest's planned treatments with DCFP's recommendations. We then talk through this document on a field trip to specific sites that highlight issues the Forest and collaborative know may be contentious. The group responds to whether the proposed treatment is in alignment with DCFP's recommendations and develops a written letter of support that is approved by the Steering Committee and forwarded to the Forest.

6. FY 2019 Agency performance measure accomplishments:

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs)
Acres of forest vegetation established FOR-VEG-EST	Acres	640	\$80,520
Acres of forest vegetation improved FOR-VEG-IMP	Acres	204	Integrated accomplishment with TMBR-VOL-HVST and FUELS
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	2,290	\$35,217 (ODA & HOC Agreements and private contract)
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres		
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	345.8	Integrated accomplishment with TMBR-VOL-HVST and FUELS
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres		
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	2.69	\$6,000
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	2,279	Integrated accomplishment with TMBR-VOL-HVST and FUELS
Acres of rangeland vegetation improved RG-VEG-IMP	Acres		
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	22.24	\$7,794
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	38.76	\$28,539
Miles of road decommissioned RD-DECOM	Miles	2	\$10,000 (volunteer in- kind)
Miles of passenger car system roads improved RD-PC-IMP	Miles	8.48	\$37,112

		CFLRP AI	nual Report: 2019
Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs)
Miles of high clearance system road improved RD-HC-IMP	Miles	3.03	\$19,760
Road Storage While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.	Miles		, , , , , ,
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number		
Miles of system trail maintained to standard TL-MAINT-STD	Miles	356.39*	\$28,488
Miles of system trail improved to standard TL-IMP-STD	Miles	4.87	Integrated with TL-MAINT-STD
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles		
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	3,180	Integrated accomplishment with TMBR-VOL-SLD costs
Volume of Timber Harvested TMBR-VOL-HVST	CCF	32,541.18	Integrated accomplishment with TMBR-VOL- SLD costs
Volume of timber sold TMBR-VOL-SLD	CCF	1,627.48**	\$1,169,319
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	66.1104	Integrated accomplishment with TMBR-VOL- SLD costs
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	672***	\$117,310
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	3,634***	\$615,879
Acres mitigated FP-FUELS-ALL-MIT-NFS	Acres	4,709	Integrated accomplishment with FP-FUELS- NON-WUI, WUI and TMBR-VOL- SLD costs
Please also include the acres of prescribed fire accomplished	Acres	2,185	Integrated accomplishment with FP-FUELS- WUI costs
Number of priority acres treated annually for invasive species on Federal lands SP-INVSPE-FED-AC	Acres		

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs)
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres		,

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

7. **FY 2019** accomplishment narrative – Summarize key accomplishments and evaluate project progress *not already described elsewhere* in this report. *For projects finishing their tenth year*, if you have any additional insights from your cumulative work over the course of the project please share those here as well. (Please limit answer to three pages.)

We are very proud of the diversity and engagement of our membership. The DCFP steering committee is comprised of 19 individuals across a diverse spectrum of stakeholder constituencies that include the traditional collaborative voices of environmental organizations and the forest products industry, as well as watershed, local government, recreation and tourism, Tribal, researchers and community fire protection. This broad representation and engagement continued to strengthen our collaborative efforts to ensure a more inclusive suite of social values are reflected in our work.

As a 2010 CFLR project with funds expiring in FY19, the DCFP and Deschutes NF strongly shifted their attention to discussing the future of restoration in this landscape and how we want to continue working together in an uncertain financial future. The Deschutes NF Forest Supervisor, District Rangers and key District and Forest level staffs discussed the positive experiences and outcomes working with a CFLRP landscape, as well as the challenges and lessons learned to consider moving forward. The Forest affirmed their commitment to implementing the outstanding projects within the CFLRP boundary, as they are integrated into the Deschutes NF 5 Year Restoration Action Plan, tied to the attainment of flagship targets and have the hard-earned support of the Deschutes Collaborative Forest Project (DCFP) membership. Similarly, the DCFP Collaborative affirmed their interest in continuing their partnership with the Deschutes NF following multiple meetings and a workshop in March 2019 that resulted in a document titled: "Deschutes Collaborative Forest Project: A Vision for the Future". This document houses their intentions for future engagement, focal areas and strategies for success. A significant outcome of these internal and external conversations is a collaborative effort to draft a 2010 CFLR Project Extension of Funds Proposal to complete holistic restoration in this highly valued landscape and sustain the social license and community support.

8. The WO (EDW) will use spatial data provided in the databases of record to estimate a treatment footprint for your review and verification. This information will be <u>posted here</u> on the internal SharePoint site for verification *after the databases of record close October 31*.

If the gPAS spatial information does NOT appear accurate, describe the total acres treated in the course of the CFLR project below (cumulative footprint acres; not a cumulative total of performance accomplishments). What was the total number of acres treated? Fiscal Year	Footprint of Acres Treated (without counting an acre of treatment on the land in more than one treatment category)
FY 2019	13,805
Estimated Cumulative Footprint of Acres (2010 or 2012 through 2019)	120,207

^{*}System trails maintained or improved were inaccurately recorded in INFRA as outside of the CFLR boundary. However, the miles reflected in the above table were reviewed in further detail using spreadsheets that housed spatial references to correct to the actual accomplishments achieved through FS personnel and in-kind volunteer match.

^{**}The timber volume harvested is low relative to the NFTM expended to prep sales and complete appraisals and contracts for reasons described in detail in the Question #9 response below.

^{***}Acres of Hazardous Fuels Reduction Treatments (WUI and non-WUI) do not match the gPAS database values, potentially due to a reporting error. However, the acres accomplished reflected in the above table were derived using GIS (clipping the CFLR boundary to FY19 fuels treatment acres within and outside of WUI) and are thus accurate FY19 accomplishments.

If you did not use the EDW estimate, please briefly describe how you arrived at the total number of footprint acres: what approach did you use to calculate the footprint?

Methodology for Determining DCFP FY19 Footprint Acres:

Using the FACTS database - activity within the following performance measures was counted: FOR-VEG-EST, FOR-VEG-IMP, FP-FUELS-WUI, FP-FUELS-NON-WUI, INVPLT-NXWD-FED-AC, INVSPE-TERR-FED-AC, RG-VEG-IMP, TMBR-BRSH-DSPSL, TMBR-SALES-TRT-AC

Approach:

- 1. Identify FY19 **ACCOMPLISHED** activity within CFLR boundary in all applicable measures except TMBR-SALES-TRT-AC.
- 2. Identify the FY19 COMPLETED activity within CFLR boundary in the TMBR-SALES-TRT-AC measure.
- 3. Merge those two layers into a single shape (with no overlap).

Process:

This is a GI exercise which involves running two visualizations, simple definition queries, and a merge of two layers.

- 1. On original 'FACTS Activity Polygons EDW' layer, select a box around the CFLR shape and run the FACTSAnyActivitybyAnyYearRSW with fiscal year set to FY=2019 (accomplished). Clip layer to CFLR boundary. Define out any activity not in applicable PAS.
- 2. On original 'FACTS Activity Polygons EDW' layer, select a box around the CFLR shape and run the FACTSJoinActivitiestoACTV160RSW. Define for fiscal year completed = 2019 and activity codes within TMBR-SALES-TRT-AC. Clip layer to CFLR boundary.
- 3. Start editing on either layer, combine the resulting layers of steps 1 & 2, and merge all records into a single shape in order to eliminate overlapping activity. Result is a footprint shape of **13,805** acres.
- 9. Describe any reasons that the FY 2019 annual report does not reflect your project proposal, previously reported planned accomplishments, or work plan. Did you face any unexpected challenges this year that caused you to change what was outlined in your proposal? *For projects finishing their tenth year*, if you have any additional insights from your cumulative work over the course of the project please share those here as well. (Please limit answer to two pages).

FY19 Planned vs. Obtained Accomplishments

FY19 proved to be a very challenging budget year. The Deschutes NF faced an over \$2 million deficit in Integrated Vegetation Management base appropriations as well as a reduction in CFLN funding, receiving only 93% of the expected FY19 allocation. As a result, the Forest could not afford to pay for the Peso Integrated Resources Service Contract (a stewardship out of the West Bend Planning Project), which would have contributed to both timber volume sold (11,310 ccf) and integrated fuels target accomplishments (1,281 acres) within the CFLR landscape. In addition, timber market values declined during the latter part of the fiscal year which was a major contributing factor as to why the Oath Timber Sale (Lex Planning Project) was not awarded. The Oath Timber Sale would have provided an additional 12,627 ccf of timber volume sold and 1,015 acres of integrated fuels target acres. The loss of these 2 sales was discouraging to Forest staff and DCFP collaborative members, as it detracted from an otherwise steady progression of restoration implementation.

Insights

With the notable exception of FY19 accomplishments deviating from the planned program of work, we have generally been successful in meeting or exceeding our objectives over the life of our CFLR project. 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 10-year period. This level of fiscal predictability is uncharacteristic of any other funding type (competitive, base NF allocations or perms and trusts) in the National Forest System. It affords us and our collaborative partners the time to focus 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. Other competitive funding sources available in the National Forest System require proposals be developed annually, but expect the same rigor around match/leveraged funding, use of new tools to improve efficiencies and well-developed partnerships. Resources invested in drafting these proposals are significant and there is no certainty a Forest will be successful in receiving those funds, creating an environment of uncertainty and risk in planning a program of work and the associated staffing to get it done. Alternatively, CFLRA legislation timelines (5-10 years) align with the realities of implementing holistic restoration over a large footprint (pace and scale) in partnership with our collaborative and communities.

9b. **(OPTIONAL) FOR INTERNAL USE:** The following responses are directed towards feedback on *internal* bottlenecks or issues that may impact your project. Please use this space to raise awareness on key internal issues, or opportunities to improve processes moving forward. Responses will be included in an internal document. What are the limiting factors to success or more success of the CFLR? How can the National Forest and its collaborators operate in a more integrated and synergized way?

10. *Project selected in 2012 and 2013 ONLY* - Planned FY 2020 Accomplishments. Not applicable to the DCFP

\1W Performance Measure Code	Unit of measure	Planned Accomplishment for 2020 (National Forest System)	Planned Accomplishment on non-NFS lands within the CFLRP landscape ³
Acres of forest vegetation established FOR-VEG- EST	Acres		
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre		
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles		
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres		
Miles of road decommissioned RD-DECOM	Miles		
Miles of passenger car system roads improved RD-PC-IMP	Miles		
Miles of high clearance system road improved RD-HC-IMP	Miles		
Volume of timber sold TMBR-VOL-SLD	CCF		
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons		

³ As we shift to more emphasis on sharing results across all lands within the CFLRP projects – if relevant for your project area – please provide estimates for planned work on non-NFS lands within the CFLRP areas for work that generally corresponds with the Agency performance measure to the left and supports the CFLRP landscape strategy. Give your best estimate at this point; if it's unknown how much work will occur off NFS lands, simply state unknown.

\1W Performance Measure Code	Unit of measure	Planned Accomplishment for 2020 (National Forest System)	Planned Accomplishment on non-NFS lands within the CFLRP landscape ³
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre		
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres		

Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2020 is available.

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

Not applicable to the DCFP.

12. Please include an up to date list of the members of your collaborative <u>if</u> it has changed from previous years. If the information is available online, you can simply include the hyperlink here. If you have engaged new collaborative members this year, please provide a brief description of their engagement.

http://deschutescollaborativeforest.org/deschutes-collaborative-members-2/

13. **Media recap**. Please share with us any hyperlinks to videos, newspaper articles, press releases, scholarly works, and photos of your project in the media that you have available. You are welcome to include links or to copy/paste.

Presentations and Educational Events:

In-person Events:

- November 7, 2018, Dry Forest Restoration on Step Terrain, one-day workshop, Redmond, OR
- Outreach Subcommittee members conducted a field tour for 35 local high school AP ecology students. Discussion topics included community values, the need for restoration, and outreach engagement strategy.
- Presentation to the Central Oregon Trail Alliance board members, introducing them to our fire-adapted ecosystem
 and the need for forest restoration. Emphasis was also placed on the need for partnership and communication
 during restoration treatments and trail closures.
- Central Oregon Community College, College of Forestry presentation to students on the importance of integrating science and social values into natural resource management on federal lands.
- Outreach Subcommittee members gave a presentation at the High Desert Museum's Pub Talk Series. Discussion topics included a history of fire on our landscape, the need for restoration and impacts on our community.
- GoodLife Brewing's Wildland Session Ale: For the third year in a row, DCFP was chosen as the recipient of GoodLife's Sustainable Session Series with the re-release the Wildland Session Ale.
- October 11, 2019, Fact-finding Mission: Management of Dry-side Forests for Fire Resiliency in Bend, Oregon Forest Resources Institute.
- November 5, 2019 High Desert Museum host new exhibit "Nature's Resilience." Highlighting the valuable role of ecological disturbances like prescribed fire.
- November 14,2019 Mule Deer discussion and panel, hosted by the DCFP Restoration Planning Subcommittee, Bend,
 OR

New Videos (Combined views = 2,320)

For the Spring 2019 awareness campaign, we developed a new video series highlighting the men and women behind prescribed fire, the planning that goes into implementation and the coordination of agencies prior and during a prescribed fire. The series garnered a combined total of 8,600 views and the "Meet the Crew" video, the second in the series, was shared by over 80 social media accounts across the country.

- Prescribed Fire Planning: https://youtu.be/796DtKJzM o
- Meet the Crew: https://youtu.be/08e-8A3gqik
- Day-of Prescribed Burn: https://youtu.be/7le7On8H4LU
- Mop it up: https://youtu.be/5B2PJwGtlH8

Top Website Traffic

The Pandora Moth returns to Central Oregon Forests

9,718 page views

Follow-up to our original story due to more recent hatching. Written by Robbie Flowers, Forest Entomologist, Deschutes National Forest, edited by Nicole Strong

http://deschutescollaborativeforest.org/forest-restoration/pandora-moth-central-oregon-deschutes-forest/

Prescribed Burning locations across Central Oregon

5,742 page views

Working in conjunction with our partners at the Deschutes National Forest, all press releases announcing prescribed burning were posted to the website, emailed through MailChimp and posted to all social media accounts.

http://deschutescollaborativeforest.org/forest-restoration/prescribed-burning-central-oregon/

Why is there paint on trees within the Deschutes Forest?

3,781 page views

One of our earliest original content blog posts and it continues to rank in our top 5 most visited pages! The successful Q&A style format continues to guide our content calendar.

http://deschutescollaborativeforest.org/forest-restoration/paint-on-trees-in-deschutes-forest-bend-oregon/

Why Prescribed Fire Matters: Healthier forests. Safer communities 1,190 page views

Written by: Pete Caligiuri – Forest Ecologist, The Nature Conservancy, Bob Madden – Deputy Chief of Fire Operations, Bend Fire Department, and Alex Enna – Prescribed Fire & Fuels Program Manager, Deschutes National Forest.

http://deschutescollaborativeforest.org/news/why-prescribed-fire-matters-healthier-forests-safer-communities/

Living with Fire - How trees, plants, and critters have adapted to live with wildfire

958 page views

Written by Nicole Strong, OSU Extension Forester, serving Crook, Deschutes, Jefferson Counties and the Confederated Tribes of the Warm Springs

 $\frac{http://deschutes collaborative forest.org/forest-restoration/living-with-fire-how-trees-plants-and-critters-have-adapted-to-live-with-wildfire/$

FY19 Press Releases re: DCFP activities, news and treatments:

Articles or news stories:

Fall 2018: Old Smokeys Newsletter -

https://oldsmokeys.org/resources/Documents/Newsletters/2018 Fall Newsletter%20 Modified.pdf

November 15, 2018: Albany Democrat-Herald - https://democratherald.com/lifestyles/wenz-adapt-now-to-changing-climate/article-b8ba0a34-9ef1-54ee-bf89-8b17721b0db9.html

December 2, 2018: The Nest - https://nestbendrealestate.com/an-interview-with-bend-oregons-new-mayor-sally-russell/

January 25, 2019: Bend Bulletin - https://www.bendbulletin.com/opinion/guest-column-forest-project-will-provide-benefits/article 697ccd31-abb5-543e-9b17-121cc6568529.html

February 17, 2019: Journal of Forestry - https://academic.oup.com/jof/article/117/2/128/5321900

February 26, 2019: Bend Bulletin - https://www.bendbulletin.com/opinion/guest-column-use-the-forests-don-t-let-them-burn/article 1fc7b731-6617-524a-a26b-4dc12e326185.html

April 7, 2019: Bend Bulletin - https://www.bendbulletin.com/localstate/bill-would-improve-fire-prevention-in-communities-near-forested-areas/article 2912410b-e772-54a6-9b46-7654a2f40e3c.html

April 23, 2019: The Nugget News - https://nuggetnews.com/Content/Current-News/Current-News/Article/Sisters-enters-burning-season/5/5/28159?s=1

April 30, 2019: Bend Bulletin - https://www.bendbulletin.com/localstate/prescribed-fires-will-close-portions-of-phil-strail-system/article e5d8fee5-ea80-544e-9e18-21321a9b54a4.html

May 5, 2019: Bend Bulletin - https://www.bendbulletin.com/localstate/prescribed-burns-lit-at-phil-s-trail-west-of-bend/article 9f82cb06-c1d3-5a06-900f-88f16e61c4d7.html

May 7, 2019: The Nugget News - https://nuggetnews.com/Content/Current-News/Current-News/Article/Why-the-forest-must-burn/5/5/28196

May 20, 2019: Oregon State University http://blogs.oregonstate.edu/collegeofforestry/2019/05/20/collaborations-envision-healthier-oregon-forests/

May 30, 2019: East Oregonian - https://www.eastoregonian.com/news/local/merkley-touts-wildfire-resilient-communities-act/article 0c538e00-8259-11e9-af0c-43b4728236bf.html

May 31, 2019: KTVZ - https://ktvz.com/news/prescribed-burn-planned-monday-east-of-sunriver/1082609126

June 3, 2019: KTVZ - https://ktvz.com/news/more-prescribed-burns-near-sunriver-sisters-crescent/1083342466

July 24, 2019: Oregon Public Broadcasting - https://www.opb.org/news/article/west-wildfire-risks-fuels-treatment-thinning-burning/

Summer 2019: University of Oregon - http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/WP 92.pdf

August 21, 2019: Bend Bulletin - https://www.bendbulletin.com/localstate/environment/7375821-151/instrumental-forest-program-seeks-funds-to-continue-thinning

August 27, 2019: The Nugget News - https://nuggetnews.com/Content/Current-News/Current-News/Article/-span-style-font-weight-bold-Forest-Service-span-prepares-for-prescribed-fires/5/5/28606?s=1

<u>September 25, 2019: Bend Bulletin - https://www.bendbulletin.com/opinion/guest-column-light-it-so-you-don-t-have-to/article 35a354cc-a097-5c89-8b44-5e1fa8ced106.html</u>

October 2, 2019: KTVZ - https://ktvz.com/news/deschutes-national-forest-starting-pile-burning/1128279643

October 5, 2019: KTVZ - https://ktvz.com/news/2019/10/05/deschutes-national-forest-plans-3-prescribed-burns/

October 11, 2019: Central Oregon Daily - https://centraloregondaily.com/local-land-managers-show-off-fire-resiliancy-tout-need-for-continued-efforts/

October 16, 2019: KTVZ - https://ktvz.com/news/shevlin-park-burns-again-to-head-off-wildfires/1132496999?fbclid=lwAR2uw3tlE7gvlkrPNW9lzBIAffx9z-52-JyR8YMGMsz1 PTtgiqdzi-tLBQ

October 17, 2019: Bend Bulletin - https://www.bendbulletin.com/localstate/prescribed-fire-to-shut-down-shevlin-park-tuesday/article 0ba54265-b1fa-5cd6-b21f-14ebb169f447.html

Press Releases:

October 2018

https://www.fs.usda.gov/detail/deschutes/news-events/?cid=FSEPRD597980

https://www.fs.usda.gov/detail/deschutes/news-events/?cid=FSEPRD599225

https://www.fs.usda.gov/detail/deschutes/news-events/?cid=FSEPRD600324

May 2019

https://www.fs.usda.gov/detail/deschutes/news-events/?cid=FSEPRD628196

https://www.fs.usda.gov/detail/deschutes/news-events/?cid=FSEPRD635877

Other Outcomes

In 2019. as an result of the DCFP collaborative work, three Central Oregon counties (Crook, Deschutes and Jefferson) health departments and the Deschutes NF, Ochoco NF, Crooked River National Grassland and the Prineville District of the BLM worked together to develop a joint website to help people know about prescribed burning and wildfire smoke and activities. Here is a <u>link</u> to the Central Oregon Fire Info website.

Signatures:

Recommended by (Project Coordinator(s)):/s/ Kristen McBride, Natural Resources Staff Officer
Approved by (Forest Supervisor(s)): _/s/ Holly Jewkes, Forest Supervisor
Draft reviewed by (collaborative chair or representative):