

Responses to the prompts on this work plan should be typed directly into this template

1. Describe the manner in which the proposal will be implemented to achieve ecological and community economic benefit, including capacity building to accomplish restoration.

The Deschutes Skyline project incorporates a “super-collaborative” that draws from five key collaborative groups in Central Oregon. Participants include representatives from federal and state agencies, conservation groups, tribes, forest product industries, community wildfire protection groups, recreation tourism industry, local and state government, private landowners and researchers. Central Oregon Partnerships for Wildfire Risk Reduction (COWPRR) and the Deschutes Fire Learning Network (FLN) are working with the Deschutes NF staff to coordinate this open and inclusive CFLR Collaborative. A charter formalizes the purpose, membership and operating guidelines. A steering group has been established and will use a voting/sign on process to move important efforts and products forward when supported by the large majority of stakeholders. Sub-committees will assist with Outreach-Communication, Restoration Planning, Monitoring and Implementation.

The key areas where collaboration will support the CFLR project are:

- 1) During the NEPA process, stakeholders will work to collaboratively develop agreement on specific restoration activities to be implemented in the individual out-year NEPA planning areas within the landscape. (Popper, Ursus, West Bend, and Drink Planning Areas).*
- 2) Post-implementation monitoring will be completed to compare the actual outcomes of activities to the project’s purpose, management objectives, and planned treatments as identified in the NEPA document. We will utilize the COPWRR Ecosystem Monitoring Committee’s qualitative, field-based, multi-party monitoring protocol. This protocol will be used to visit and review implemented units in the on-going Glaze Meadow, SAFR and West Tumbull projects. Over a ten year period, monitoring will be conducted on approximately 30-45 implementation units across the landscape. The objective of monitoring will be to stimulate shared learning and adaptive management and to help build trust among stakeholders.*
- 3) COPWRR, FLN, and the FS will organize field tours and public meetings to help the broader community learn about the landscape restoration project, provide input, track progress and discuss results.*

Anticipated Ecological Outcomes and Benefits: *A restored landscape managed within the natural and historic range of variability that provides a diversity of habitats, while protecting the surrounding communities from wildfire. This landscape will have increased resilience to wildfire and allow for management options that include the management of naturally ignited fires in appropriate, cost-saving ways.*

Anticipated Community and Economic Outcomes and Benefits:

Community Protection: *Restoring ponderosa pine and dry mixed conifer forest types will change fuel models from heavy timber, needle litter to models associated with grass/ needle fuels and little ladder fuels. Applying CFLRP funding within this 130,000 acre landscape will provide cost-saving opportunities to manage fire on a broader scale with lower contingencies resulting in lower costs.*

Employment: *It is expected that 108 jobs in the forest products industry will be provided for 10 years from the collective investment in the landscape. This could increase by 30-60 jobs if the biomass industry expands. Eleven jobs may be created from restoration and non-commercial thinning activities.*

Recreation: *The landscape restoration proposed will protect the sustainability of our forests further enhancing the current and future recreation opportunities.*

2. Anticipated unit treatment cost reduction over ten years:

The work to be accomplished in the CFLRP area is focused on hazardous fuels reduction treatments, noxious weed control, watershed and fish passage improvement. The wood products that will be produced will help meet project objectives by reducing overall costs. Over the 10 year life of the project, treatments should lead to restored ecosystem resilience where lower maintenance costs can be realized (e.g. underburning and brush mowing).

Performance Measure Code	Average Historic Unit Cost	Cost Reduction per Unit	Assumptions
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	\$305/ac average cost	Unknown	Estimate is based on 7,300 footprint treatment acres/year with approx \$2,229,950 funding/year
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Total costs \$45,000/660 ac = \$68/ac	Unknown	FS and CFLR dollars are matched with in-kind labor from volunteers and work crews
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	\$5,000 to \$1 million	None	Fish passage enhancement costs will vary dependent on the nature of the project.
Miles of stream habitat restored or enhanced HBT-ENH-STRM	1.0 mile/ \$300,000	None	Average costs
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	20,000 ac/10 yr= 2,000 ac /yr	None	Some of these acres will be accomplished using stewardship contracts
Volume of timber sold (CCF) TMBR-VOL-SLD	45 mmbf/10 yr= 4.5mmbf/ yr	Variable	Timber markets are variable, costs could go up or down
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	240,000 gt/10 yr= 24,000 gt/yr	Variable	This estimate is based on existing capacity, if new biomass businesses become established, then costs may be reduced and more volume may be obtained.
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	53,000 ac/10 yr= 5,300 ac/yr	Reduction in costs over time	Initial treatments will be most expensive and will decrease over time as future treatments on these same acres will be at maintenance levels

3. Anticipated costs for infrastructure needed to implement project:

As discussed in our proposal, Central Oregon has retained significant industrial infrastructure and this infrastructure should be adequate to implement the project described. However, additional small diameter and biomass utilizing infrastructure has been proposed for the region and these new pieces of industrial infrastructure would further reduce costs for treatments and allow for more rapid and more extensive implementation. These potential additional pieces of infrastructure are detailed below:

Type of Infrastructure	Anticipated Cost	Funding Source (federal, private, etc)
Torrefied biomass briquette plant	\$4.5 million	Private investment
S4S Planing Mill to make construction grade lumber	\$800,000	Private investment
Biomass-fueled burner-dryer system (for shavings drying)	\$1.5 million	Private investment, state tax credit
Biomass boiler and space heating system Mt. Bachelor	\$2 million	Private investment, state tax credit
Warm Springs and Biogreen Sustainable Energy biomass power plants	\$80 million per plant	Private investment, state and federal tax credits
Firewood processor	\$75,000	Private investment

4. Projected sustainability of the supply of woody biomass and small diameter trees removed in ecological restoration treatments:

Fiscal Year	Number of acres to be treated	Projected Green Tons Removed per Acre	Total Green Tons Available
2010	2857	12	34,284
2011	1493	12	17,916
2012	1951	12	23,412
2013	2082	12	24,984
2014	2448	12	29,376
2015	2412	12	28,944
2016	2098	12	25,176
2017	1870	12	22,440
2018	1422	12	17,064
2019	1368	12	16,416

5. Projected local economic benefits:

Type of projects	Total direct jobs	Total indirect jobs	Total Direct Labor Income	Total Indirect Labor Income ¹
Commercial Forest Products	9.6	12.4	\$344,868	\$ 425,936
Other Project Activities	20.4	6.2	\$684,716	\$ 247,067
TOTALS:	30.0	18.6	\$1,029,584	\$ 673,003

6. Document the non-Federal investment in the priority landscape:

It is anticipated that the non-Federal investment in the Deschutes Skyline CFLRP will increase over the levels listed below and in our proposal. The collaborative group will be involved in outreach and communication that will likely to lead to additional opportunities for partnerships within the landscape.

Source of Investment	Amount of Investment	Description of Use
OWEB, City of Bend, Pelton Fund, Trout Unlimited, Rocky Mtn Elk	\$1,667,000	Water quality monitoring, fish passage improvement projects, wildlife habitat improvement projects.
In Kind Labor/Service	\$ 298,930	Volunteer monitoring of project outcomes; labor on trails, rec sites, noxious weed pulling, etc.

7. Plans to decommission any temporary roads established to carry out the proposal:

The following table includes a rough estimate of the miles of temporary roads that may be decommissioned. Many of the CFLR project areas do not have NEPA analyses or decisions completed at this time.

Projected accomplishment year (fiscal)	Number of Miles to be Decommissioned
2010	
2011	West Tumbull; 1 mi; SAFR 2 mi
2012	SAFR 1 mi; Glaze 1 mi
2013	SAFR 1 mi, Glaze 1 mi, West Bend, 9 mi
2014	West Bend, 9 mi; Popper 1 mi
2015	West Bend, 9 mi; Popper, 1 mi
2016	West Bend, 5 mi, Popper 1mi
2017	West Bend, 4 mi, Popper 1 mi
2018	West Bend, 5 mi, Popper 1 mi
2019	West Bend, 4 mi

¹ Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet, "Impacts-Jobs and Income" tab. Spreadsheet available at [INSERT WEBSITE HERE](#)