# CFLR Project (Name/Number): CFLN20 Missouri Pine-Oak Woodland Restoration Project National Forest(s): Mark Twain National Forest

#### 1. Match and Leveraged Funds:

#### a. FY17 Matching Funds Documentation

Fund Source – (CFLN/CFLR Funds Expended)	Total Funds Expended in Fiscal Year 2017	
CFLN15	\$9,858.56	
CFLN16	\$88,048.39	
CFLN17	\$844,092.98	

This amount should match the amount of CFLR/CFLN dollars obligated in the PAS expenditure report. Include prior year CFLN dollars expended in this Fiscal Year.

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 2017
NFVW	\$502,495.85

This value (aka carryover funds or WO unobligated 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	Total Funds Expended in Fiscal Year
(please include a new row for each BLI)	2017
CMRD	\$13,881.08
CWKV	\$171,024.25
NFTM	\$472,761.20
NFVW	\$34,750
WFHF	\$108,007.40

This amount should match the amount of matching funds obligated in the gPAS 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.

Fund Source – (Funds contributed through agreements)	Total Funds Expended in Fiscal Year 2017
Missouri State University Hydrology Monitoring/Study	\$61,848.92

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 gPAS job 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 WIT database.

Fund Source – (Partner In-Kind Contributions)	Total Funds Expended in Fiscal Year 2017	
Northern Research Station – LANDIS-Modeling Landscape	\$10,000	
Change support		

CFLRP Annual Report: 2017

Fund Source – (Partner In-Kind Contributions)	Total Funds Expended in Fiscal Year	
	2017	
Oak Woodland and Forest Fire Consortium – Development of	\$1,500	
interruptive signs and Fire Ecology workshop		

Total partner in-kind contributions for implementation and monitoring of a CFLR project. 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 FY17)	Totals
Total <u>revised non-monetary credit limit</u> for contracts awarded in FY17	\$114,304.00

Revised non-monetary credit limits for contracts awarded prior to FY17 were captured in previous reports. This 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.

b. Please provide a narrative or table describing leveraged funds in your landscape in FY2017 (one page maximum). Leveraged funds refer to funds or in-kind services that help the project achieve proposed objectives but do not meet match qualifications. Examples include but are not limited to: investments within landscape on non-NFS lands, investments in restoration equipment, worker training for implementation and monitoring, research conducted that helps project achieve proposed objectives, and purchase of equipment for wood processing that will use restoration by-products from CFLR projects. See "Instructions" document for additional information.

The Forest is working with the Oak Woodland and Forest Fire Consortium to develop an interruptive driving tour with interruptive panels, and downloadable audio tour. The consortium has completed layout and designed and purchased five of these interruptive panels costing \$9,257 (FY 16). Here is a <u>sample</u> of one of the signs.

In addition, the Forest has collaborated with the Consortium to develop <u>fire ecology workshops</u> aimed to deliver fire science to interested landowners and members of the general public. These workshops will have indoor presentations and in-the-field discussion and are organized in partnership with The Nature Conservancy, National Wild Turkey Federation, Missouri Department of Conservation, Mark Twain National Forest, and the Missouri Department of Natural Resources.

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.

The current treatments in the CFLRP this past year was 18,000 ac of prescribe fire and 5,000 ac of mechanical treatment. In these areas, we are expecting the structure to be more open and a return of native grasses and forbs at the ground level. The conversion of the groundcover from downed woody/slash fuels to fine flashy fuels will reduce the residual heating and long term intense heating on residual trees. The flashy fine fuels will

create short duration fire and low intensity fire behavior during dry periods and normal fire season. Restoring a fire dependent ecosystem to more of a maintenance fire system than a stand replacement system.

Our observations and data collection are showing a good response in the overall structure of the overstory and midstory vegetation. There are also improvements in groundcover vegetation response in areas where there were a combination of multiple burns (three or more) and a mechanical overstory treatment. Optimal prescribed burn objectives are generally as follows:

- A. Conduct the initial prescribed burn-taking advantage of heavy fuel loading to remove competing understory woody vegetation, especially in those stands not being thinned. Special care will be taken to mitigate the effects of slash accumulations in stands thinned or where hardwoods are reduced.
- B. Continue prescribed burns at an interval sufficient to continue reducing the initial deep deciduous leaf litter layer toward mineral soil to stimulate development of the grass-sedge-herb ground layer.
- C. Modify prescribed burn intervals and burn parameters to accommodate a dominant grass/sedge/herb fuel type, when achieved.

The challenge is maintaining the openness. We are finding that the non-native species groundcover and oak sprouts have a successful response to prescribe fire. The next step is to research more on seasonality burns (growing season) and alternative fuel treatment (biological/chemical) to target certain species.

There has been no reports of Fuel Effectiveness Monitoring Reports in the CFLRP. We are currently reviewing the wildfire history and will be updating the database, if we find any wildfires that meet the requirement.

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 <a href="here">here</a>.

The inputs used in generating the number and/or percentages for CFLR/N and all matching funds are derived from WorkPlan and expenditure reports (transaction register). Product distributions were generated from TIMs cut and sold report.

#### FY 2017 Jobs Supported/Maintained (FY17 CFLR/CFLN/ WO carryover funding):

FY 2017 Jobs Supported/Maintained	Jobs (Full and Part- Time) (Direct)	Jobs (Full and Part- Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	65	98	2,800,062	3,338,370
Forest and watershed restoration component	10	12	133,051	225,218
Mill processing component	93	160	3,672,215	6,708,803
Implementation and monitoring	4	5	131,783	147,663
Other Project Activities	0.31	0.46	10,737	18,188
TOTALS:	173	273	6,747,848	10,438,243

FY 2017 Jobs Supported/Maintained (FY16 CFLR/CFLN/ WO carryover and matching funding):

FY 2017 Jobs	Jobs (Full	Jobs (Full	Labor	Labor
Supported/Maintained	and Part-	and Part-	Income	Income
	Time)	Time)	(Direct)	(Total)
	(Direct)	(Total)		
Timber harvesting component	65	96	2,800,062	3,338,370
Forest and watershed	10	12	131,344	226,720
restoration component	10	12	131,344	220,720
Mill processing component	93	160	3,672,215	6,708,803
Implementation and	5	8	541,275	606,499
monitoring	3	0	341,273	000,499
Other Project Activities	0.42	1	14,496	24,555
TOTALS:	174	276	7,159,392	10,904,948

# 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)
# Cross-institutional agreements/policies	The Forest has a Challenge Cost Share Agreement with Missouri State University and has financial arrangements with the Northern Research Station for assistance in monitoring.	NA
% Locally retained contracts	All timber sales, timber marking contracts, invasive species treatment contracts have been to local contractors within the State.	NA
Ease of doing business	CFLN and the required matching has allowed for more personal, flexibility in contracting and agreements.	NA
Relationship building/collaborative work	The Forest has had over 20 executed Wyden Amendments Participating Agreements to conduct prescribed fire on private lands adjacent to Forest Service lands.	NA

The Missouri Pine-Oak Restoration Project is slated for implementation across 126 thousand acres within the Mark Twain National Forest (MTNF). This area corresponds to about 8% of MTNF. About \$20 million will be invested to implement the project with one half funded through the CFLRP national fund and the other half through the Knutson-Vandenberg Fund and nongovernmental sources. The \$20 million invested on MTNF-CFLRP implementation over the 2012-2019 period are expected to support an average of 141 jobs, generate \$33.7 million in labor income and contribute \$44.2 million in added value to the regional 9-county economy. Merchantable tree volume at the end of this period is expected to exceed the initial amount by 14% although

growth in timber volume will be lower than if the MTNF-CFLRP had not been implemented. Given the size and scope of the MTNF-CFLRP there were no sizeable or discernable negative effects to the local wood products industry although impacts on particular industry segments will need further evaluation.

#### **Highlights**

- Lands managed under the Mark Twain National Forest Collaborative Forest Land Restoration Project (MTNF-CFLRP) represent about 0.8% of all Missouri forests and 8% of lands in the Mark Twain National Forest.
- Results from economic and vegetation models show that total MTNF-CFLRP investments and subsequent implementation activities from 2012 to 2019 will likely result in:
  - annual average of 141 jobs supported, \$33.7 million in labor income, and \$44.2 million in added economic value to the local economy (nine-county region where the project is expected to have its largest impact)
  - \$2.2 dollars added to the local economy for every dollar invested
  - 9.2 million in tax revenues
- Merchantable tree volume by the end of 2019 is estimated to be 14% greater with the implementation of the MTNF-CFLRP as compared to initial conditions.
- 5. Based on your project monitoring plan, describe the multiparty monitoring process. What parties (who) are involved in monitoring, and how? 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. What are the current weaknesses or shortcomings of the monitoring process? (Please limit answer to two pages. Include a link to your monitoring plan if it is available).

The Forest has a variety of collaborators assisting with multi-party monitoring with Central Hardwood Joint Ventures and The Nature Conservancy providing a leadership role. In 2018, the collaborative plans to meet to assess revisit the project monitoring plan and to reassess and plan out the remaining monitoring required for the 15 year period. Below is a summary of monitoring completed to date.

#### **Bird Monitoring**

The Missouri Pine-Oak Woodland Restoration Project implemented bird monitoring to 1) determine changes in abundance in response to restoration activities in the cooperative forest landscape restoration projects (CFLR) and 2) determine relationships between bird abundance and vegetation structure and composition in the Mark Twain National Forest. Objective 1 will require bird surveys spaced over the duration of the project. However, initial results from objective 2 will be available after 3 years based on the current variation in structure and management that has already taken place.

Monitoring crews completed diurnal bird surveys at 151 FQI (Floristic Quality Inventory) points and 100 additional grid points within the CFLR project area in portions of the Eleven Point and Poplar Bluff Ranger Districts between May 27 and June 31, 2015; these were the same points surveyed in 2013 and 2014.

Detection of similar numbers of birds on diurnal point counts across all three years with the exception of a noticeable decrease in Acadian Flycatcher detections in 2015. Abundant number of species characteristic of open woodland and savanna (e.g. Prairie warbler, Yellow-breasted chat) as well as species characteristic of closed canopy forest (e.g. Acadian flycatcher, Ovenbird) were detected in 2015.

Continued monitoring efforts for reproductive success started in 2014. Nest success was monitored on two new plots in the project area from April 1 to August 8, 2015. The two-70 hectare plots contained point counts and included stands with recent restoration management and stands with no recent management. Nest were searched for and monitored for six species commonly found in savanna and woodland and that also span the range of nest height placement: Eastern Towhee, Yellow-breasted Chat, Prairie Warbler, Summer Tanager, Eastern Wood-Pewee, and Pine Warbler.

Continued nocturnal roadside surveys for Eastern Whip-poor-will and Chuck-will's-widow started in 2014. We used a modified protocol from the National Nightjar Survey Network and conducted 152 point counts along county and forest roads within and around the CFLR project area from April 30 to June 30, 2015. Two-hundred forty four Eastern Whip-poor-will and 121 Chuck-will's-widow were detected in 2015.

Melissa Roach, a University of Missouri graduate student has been monitoring bird response and has found pine- savanna and woodland restoration is benefiting nesting success of multiple species and guilds and is providing additional, possibly critical, habitat for declining early-successional species and species of concern. The positive relationship with focal species' nest success and densities provides even stronger inference that pine-savanna and woodland restoration is benefitting some bird species of concern. Management activities are effectively creating the necessary vegetation characteristics to attract focal species and these species are successfully nesting in these areas (Melissa Roach 2015).

No monitoring occurred in 2017, however, the Forest will be collaborating with Northern Research Station and Central Hardwoods Joint Ventures in modeling habitat in 2018. This will is done to determine the possibility and practicality of re-introducing Brown-headed nuthatch to the CFLRP project area. Melissa Roach has completed a paper on the results of this monitoring and is awaiting publication.

#### Watershed Monitoring

The Forest has a challenge cost share agreement (#15-CS-11090500-036) with Missouri State University and the Ozark Environmental and Water Resource Institute to conduct studies of forest management in the CFLRP area. The purpose of these studies is to monitor hydrological conditions of typical small streams within the Big Barren Creek watershed under different management conditions. The overall goal is to compare runoff yields and hydrograph shape among the different watersheds. The specific objectives of this project are to: 1) install 10 level logger gaging stations at 2<sup>nd</sup> and 3rd order streams where upstream watershed areas have different burn histories and monitor stage throughout the length of the project; 2) develop discharge rating curves to calculate annual runoff volume and for flow frequency analysis for each watershed; and 3) compare runoff characteristics of burned versus unburned watersheds. Year 1 work on this goal included site selection and installation of stage gages, development of stage-discharge rating curves using measured and modeled

discharges, and preliminary runoff analysis. Project years 2 to 5 included continued discharge data collection, evaluation of site locations and potential adjustments to gaging network sites, more rigorous analysis of runoff records as affected by sub-watershed topography and soils, land use, forest management practices, and seasonal timing of events. The following was completed in 2017

- 1. Marc Owen, OEWRI, Gave a presentation on OEWRI projects in the Big Barren Creek Watershed, at the Region 9 Silviculture Workshop, March 8, 2017.
- 2. Marc Owen, OEWRI, Led a field trip to the North Fork River and Big Barren Creek Watershed for personnel from the Supervisors, Regional, and Washington D.C. Offices if the US Forest Service, May 4-5th 2017.
- 3. Submitted two annual reports on (1) Stream flow and temperature monitoring results and (2) Stream road crossing assessment.

Here is a <u>link</u> to papers and poster presentation completed in 2017 discussing results to studies completed in the CFLRP area.

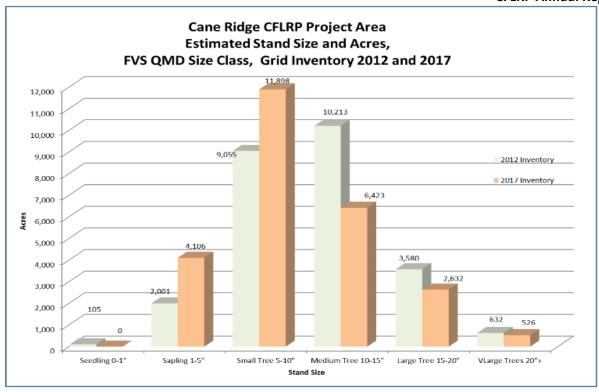
#### **Smoke Monitoring**

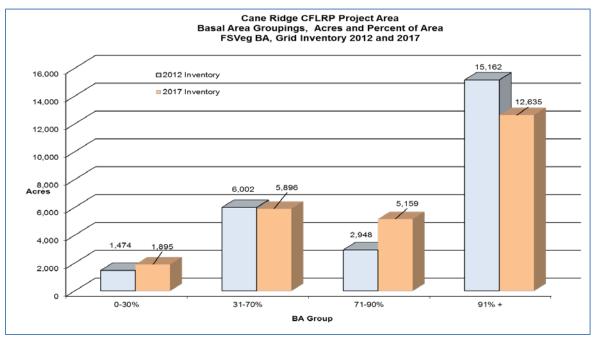
As a result of public concerns over prescribed fire activities and the effects this may have on air quality, the Forest has initiated additional smoke monitoring efforts that started in the spring of 2016. The Region has purchased for the Forest two E-Samplers that are utilized at receptor sites at selected prescribed burns based on smoke modeling by the Regional Air Quality Specialist. In addition, fixed visual smoke monitoring cameras will be placed in the key location (e.g. tower sites) within the project area. The following link is to one of four smoke monitoring assessments completed 2016. A new assessment for 2017 is being completed.

#### Pineknot S, Big Barren Smoke Assessment

#### Grid Inventory and LANDIS Modeling

Re-measures of the grid plot inventory on 1,320 plots within the CFLRP project area has begun with contracting of all plots in the Cane Ridge unit in 2017. These fixed plots are used to measure structural changes such as changes in canopy closure and basal area. This data will be used in FSveg and LANDIS modeling to measure how well restoration objectives are being meet. Some preliminary results for portions of the CFLRP project area displayed below.





We worked with collaborators from NRS and University of Missouri to apply the LANDIS PRO forest landscape model to analyze expected outcomes for a century of management under alternative scenarios with and without harvesting and burning (Jin et al. 2017). We predicted that pine-dominated woodlands could be restored and sustained on this landscape with periodic timber harvesting (including removal of low-valued small-diameter trees) and frequent burning. Recreating a woodland overstory of 40 to 80% canopy cover required scenarios with timber harvesting on a roughly 20-year reentry cycle to reduce tree cover and increases in the fire frequency (every four years) increased the proportion of pines at the end of the century. All scenarios without timber harvesting resulted in a landscape dominated by closed-canopy oak forest. With

neither burning nor harvesting the proportion of white oaks increased. Repeated burning without harvesting increased the proportion of pines in the overstory, but the closed-canopy overstory will remain dominated by an oak overstory.

## **6.** FY 2017 accomplishments

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs)
Acres of forest vegetation established FOR-VEG-EST	Acres	821	CFKV \$54,663
Acres of forest vegetation improved FOR-VEG-IMP	Acres	1,787	CFKV \$60,935 CFVW \$97,831
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	738	CFLN/CFVW - \$29,850.60 CFLN - \$34,062.99 FNVW/CFLN \$19,427.10. Avg = \$61.59/ac
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	38,076	Integrated
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	8.48	CFVW \$53,309 CFVW \$8,665
Miles of passenger car system roads improved RD-PC-IMP	Miles	2.66	CFVW \$117K CFVW \$50,646
Miles of high clearance system road improved RD-HC-IMP	Miles	12.33	CFVW \$76,876 Avg. 13,059/mi
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	1,712	NA
Volume of timber sold TMBR-VOL-SLD	CCF	36,198	NA
Green tons from small diameter and low value trees removed from NFS lands and made available for bioenergy production BIO-NRG	Green tons	10,858	NA
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	10,564	Prescribed Fire \$15/ac
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	8,029	Prescribed Fire \$15/ac

CFLRP Annual Report: 2017

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs)
Please also include the acres of prescribed fire accomplished (note: this performance measure will not show up in the WO gPAS reports – please use your own records)	Acres	18,593	NA

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

7. **FY 2017 accomplishment narrative** – Summarize key accomplishments and evaluate project progress not already described elsewhere in this report. (Please limit answer to three pages.)

**Planning:** The Forest has finish Cane Ridge Small Tree ES that analyzed 4,130 treatment acres, of that 2,581 midstory control, 290 acres PCT, and 1,259 commercial thin on the Cane Ridge unit. A decision notice was signed on April 6th, 2017 authorizing these activities.

The Forest work with the National Wild Turkey Federation on a new supplemental project agreement (SPA, 18-SA-11090523)) under the National Master Agreement (#17-SA-11083150-010) for the Handy Project area within the CFLRP project area. This SPA will result in numerous Stewardship Contract use timber value to complete service work for openlands restoration and maintenance activities such as mastication of eastern red cedar and other undesirable woody shrubs, mowing, gates and signs. The agreement was executed on November 20, 2017.

**Contracting/Grants and Agreements:** The following contracted activities occurred in 2017 within the CFLRP project area.

Feral Hog Eradication: The Forest invested \$20,000 of CFLN to its existing Interagency Agreement with USDA Animal and Plant Health Inspection Services, Wildlife Services (IAA number 141A11090500011). Funding from AHPIS, Missouri Department of Conservation and the Corp of Engineers was used to hire an additional Wildlife Services employee solely responsible for feral hog eradication in Southeast Missouri. The additional Forest Service funding has increases feral hog trapping within the CFLRP project area. Within the CFLRP project area three traps were constructed and utilized resulting in over forty feral hogs remove from the Cane Ridge unit. Aerial gunning of feral hogs also occurred on the Cane Ridge unit covering approximately 30,000 acres. These efforts will continue in 2018. This activity is vital to removing the negative impacts feral hogs are having on vegetation, soil and water resources, wildlife and wildlife habitats, public safety and to protect the Forest Service investment in restoration activities that occur as a result of the CFLR program. Here is a link to our Forest-wide feral hog trapping efforts in cooperation with APHIS Wildlife Services.

Joint Chiefs Landscape Restoration Partnership Project – Missouri Ozark Highlands Restoration Partnership:

In 2015 the Mark Twain National Forest initiated its partnership with Natural Resource Conservation Service (NRCS) to implement its goal of unifying conservation priorities across organizations and property boundaries

by broadening the reach of conservation within the Current River Watershed. Partners for this Project include: Missouri Department of Conservation; The Nature Conservancy; U.S. Fish and Wildlife Service; National Wild Turkey Federation; Missouri Forest Products Association; National Park Service Ozark National Scenic Riverways; USDA National Agroforestry Center; Central Hardwoods Joint Venture; Missouri Forest Resources Advisory Council; Missouri Department of Natural Resources. The following activities were completed with Joint Chiefs funding within the CFLRP project area.

Activity/Treatment	2017 FS Activities
Fuel Reduction	5,175 Acres
Terrestrial Wildlife Habitat	30,000 Acres
Improvement	
Invasive Plant Treatments	253 Acres

The Mark Twain National Forest and NRCS are also partnering with the National Wild Turkey Federation (NWTF) and have hired a shared Forester position funded by the Forest Service, NRCS and NWTF. This new NWTF Forester position assist with NRCS EQIP program and the Forest Service with Stewardship contracts (Agreement No: 15-CS-110905000-033)

- 8. The WO will use spatial data provided in the databases of record close to estimate a treatment footprint for your review and verification.
  - If the estimate is consistent and accurate, please confirm that below and skip this question.
  - **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 2017	20,363
Estimated Cumulative Footprint of Acres (2010 or 2012 through 2017)	69,253

9. Describe any reasons that the FY 2017 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? (Please limit answer to two pages).

No

#### **10.** Planned FY 2019 Accomplishments

Performance Measure Code	Unit of measure	Work Plan 2019	Planned Accomplishment For 2019	Amount (\$)
Acres of forest vegetation established FOR-VEG-EST	Acres	250	250	\$18,000

CFLRP Annual Report: 2017

Performance Measure Code	Unit of	<b>Work Plan</b>	Planned	Amount (\$)
	measure	2019	Accomplishment	
			For 2019	
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	300	300	\$30,000
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	30,000	30,000	Integrated
Miles of passenger car system roads improved RD-PC-IMP	Miles	2.0	2.0	\$50,000
Miles of high clearance system road improved RD-HC-IMP	Miles	2.0	2.0	\$50,000
Volume of timber sold TMBR-VOL-SLD	CCF	18,000	18,000	NA
Green tons from small diameter and	Green			
low value trees removed from NFS	tons	5,000	5,000	NA
lands and made available for bio- energy production BIO-NRG		3,000	3,000	IVA
Acres of hazardous fuels treated	Acre			
outside the wildland/urban interface				
(WUI) to reduce the risk of		7,000	7,000	\$96,000
catastrophic wildland fire FP-FUELS-				
NON-WUI	_			
Acres of wildland/urban interface	Acres			
(WUI) high priority hazardous fuels treated to reduce the risk of		7,000	7,000	¢06.000
catastrophic wildland fire FP-FUELS-		7,000	7,000	\$96,000
WUI				

Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2019 is available. Use actual planned funding if quantity is less than specified in CFLRP project work plan.

- 11. Planned accomplishment narrative and justification if planned FY 2018/19 accomplishments and/or funding differs from CFLRP project work plan (no more than 1 page): No Changes
- 12. Please include an up to date list of the members of your collaborative if 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.

No change

13. **Did you project try any new approaches to increasing partner match funding in FY2017** (both In-Kind contributions and through agreements)? (No more than one page):

Not currently.

## 14. 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.

NA

Signatures:	
Recommended by (Project Coordinator(s)): May Muscles	
Approved by (Forest Supervisor(s)): Michael & Carp.	
(OPTIONAL) Reviewed by (collaborative chair or representative):	