

25CFLR Project(Name/Number): Missouri Pine-Oak Woodland Restoration/CFLN20
 National Forest(s): Mark Twain National Forest

Responses to the prompts on this annual report should be typed directly into this template, including narratives and tables:

1. Match and Leverage funds:

a. FY13 Matching Funds Documentation

Fund Source – (CFLR Funds Expended ¹)	Total Funds Expended in Fiscal Year 2013(\$)
	531,335

Fund Source – (Carryover funds expended (Carryover to in addition to CFLR/CFLN) ² (please include a new row for each BLI))	Total Funds Expended in Fiscal Year 2013(\$)
CFTM	296,150

Fund Source – (FS Matching Funds (please include a new row for each BLI) ³)	Total Funds Expended in Fiscal Year 2013(\$)
CFRD20	9,290
CFKV20	4,140
CFLM20	43,352
CFTM20	105,152
CFVW20	34,258
CFHF20	61,599
Total	1,085,276

Fund Source – (Funds contributed through agreements ⁴)	Total Funds Expended in Fiscal Year 2013(\$)

Fund Source – (Partner In-Kind Contributions ⁵)	Total Funds Expended in Fiscal Year 2013(\$)
Central Hardwood Joint Ventures - Continued coordination of the Interior Highlands Shortleaf Pine Restoration Initiative, including development of a set of “desired future conditions” for shortleaf pine-bluestem, dry-mesic pine-oak and dry pine-oak systems; drafting of a communications document for the initiative and organizing a meeting of the group at West Plains, MO in July 2013.	5,500.00
University of Missouri and - 2013 Bird Monitoring.	14,500

¹ This amount should match the amount of CFLR/CFLN dollars obligated in the PAS report titled CFLR Job Code Listing and Expenditure Report – Detailed Analysis by Fiscal Year.

² This value should reflect the amount of carryover funds allocated to a project as indicated in the program direction, but does not necessarily need to be in the same BLIs as indicated in the program direction. These funds should total the matching funds obligated in the PAS report.

³ This amount should match the amount of matching funds obligated in the PAS report.

⁴ Please document any partner contributions to implementation and monitoring of the CFLR project through an agreement (this should only include funds that weren’t already captured through the PAS job code structure for CFLR matching funds). Please list the partner organizations involved in the agreement.

⁵ Total partner in-kind contributions for implementation and monitoring of a CFLR project. Please list the partner organizations that provided in-kind contributions. See “Annual Report instructions” for instructions on how to document in-kind contributions.

Fund Source – (Service work accomplishment through goods-for services funding within a stewardship contract ⁶)	Total Funds Expended in Fiscal Year 2013(\$)
	53,164

b. Please provide a narrative or table describing leveraged funds in your landscape in FY2012 (one page maximum)

We do not have any leveraged funds to report.

Approved by (Forest Supervisor): /s/ William B. Nightingale

Approved by (Forest Supervisor): _____

⁶ This should be the amount in the “stewardship credits charged” column at the end of the fiscal year in the TSA report TSA90R-01.

2. Discuss how the CLFR project contributes to accomplishment of the performance measures in the 10 year Comprehensive Strategy Implementation Plan⁷, dated December 2006. Please comment on the cumulative contributions over the life of the project if appropriate. This may also include a description of the fire year (fire activity that occurred in the project area) as a backdrop to your response (please limit answer to one page).

The Missouri Pine Woodland Restoration project addresses the 10-year strategy, as demonstrated by the following accomplishments:

- All wildfires within the CFLR boundary were controlled during initial attack in FY 13. There were no wildfires in the CFLR project area which required recovery plans or treatments. There are no areas on MTNF identified or designated for wildland fire use at this time.
- There were 12 wildfires on the Eleven Point District and 2 wildfires on the Poplar Bluff District, which is lower than annual average for these 2 units.
- A CWPP was completed for Shannon County in April 2012. It identified WUI as the zone of transition between unoccupied land and human development. All Shannon County communities were considered as being within WUI.
- The Forest completed mapping of WUI areas for the Forest and the CFLR project area.
- The Mark Twain National Forest uses the HFRA WUI definition and federal register data on communities at risk. In FY 2013, fuels were reduced and FRCC improved on 4,259 acres treated by prescribed burning within WUI on National Forest System lands. Missouri communities-at-risk in the vicinity of these treatments include: Pine and Ellsinore.
- There were also 2,214 non-WUI acres treated by prescribed burning. All treated acres were identified as priority based on potential for restoration, year last treated, and ability to reach restoration objectives. Over 3,570 acres of National Park Service, Missouri Department of Conservation, Pioneer Forest, and The Nature Conservancy lands were treated with prescribed burning in 2013.
- 100% of treated acres moved toward desired conditions. Treatments are designed to restore fire-adapted ecosystems and facilitate fire suppression as described in the National Fire Plan. Although many of these areas have been treated more than once, none have achieved desired conditions yet.
- In 2013, a total of approximately \$ 112,316 was invested by the Forest Service in a prescribed fire and fuels treatments within the project area—9,621 acres of fuels treatments were accomplished at a cost of approximately \$15/acre.

3. What assumptions were used in generating the numbers and/or percentages you plugged into the TREAT tool?

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

FY 2013 Jobs Created/Maintained (FY13 CFLR/CFLN/ Carryover funding only):

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income ⁸
Commercial Forest Product Activities	37	67.8	\$1,484,938	\$3,118,909

⁷ The 10-year Comprehensive Strategy was developed in response to the Conference Report for the Fiscal Year 2001, Interior and Related Agencies Appropriations Act (Public Law 106-291).

⁸ Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet, "Impacts-Jobs and Income" tab. Spreadsheet and directions available at <http://www.fs.fed.us/restoration/CFLR/submittingproposals.shtml#tools>.

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income ⁸
Other Project Activities	2.1	3.1	\$67,009	\$105,102
TOTALS:	39.9	70.9	\$1,551,947	\$3,224,001

FY 2013 Jobs Created/Maintained (FY13 CFLR/CFLN/ Carryover and matching funding):

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income ⁹
Commercial Forest Product Activities	76.6	174.9	\$4,102,610	\$7,873,158
Other Project Activities	1.8	2.8	\$72,948	\$114,215
TOTALS:	78.4	177.7	\$4,175,558	\$7,987,372

4. Describe other community benefits achieved and the methods used to gather information about these benefits (Please limit answer to two pages).

At this point, the MOPWR project will be using the TREAT worksheet to quantify economic benefits to the affected counties (Shannon, Carter, Oregon, Ripley, Butler, Wayne, Texas, Reynolds, Howell and Wright). In 2013, 17% of all funds went toward contracted work (thinning contracts, road reconstruction, landlines and invasive species treatments). There are currently 14 active timber sales with the majority of the contractors from Shannon, Carter, Butler and Howell counties.

The Forest is investigating opportunities with Northern Research and University of Missouri to further enhance its quantification of the economic and social impacts of restoration work on the Mark Twain National Forest.

5. Describe the multiparty monitoring, evaluation, and accountability process (please limit answer to two pages).

The multipart monitoring was initiated in 2013 with implementation of bird monitoring on the Mark Twain and Ouachita National Forest Pine-Woodland Forest Landscape Restoration Projects. Each project is implementing bird monitoring to 1) determine change in abundance in response to restoration activities and 2) determine relationships between bird abundance and vegetation structure and composition. The first objective will require bird surveys spaced over the duration of the project. Results from the second objective will be available after 3 years based on the current variation in structure a management that has already taken place.

The Northern Research Station received \$16,000 from the Ouachita National Forest and \$33,000 from the Mark Twain National Forest through in-service agreements to implement monitoring in 2013. A research specialist with the University of Missouri was assigned to manage the project and hired three technicians to help complete surveys. The Missouri Department of Conservation and Arkansas Game and Fish Commission provided housing.

Bird abundance was surveyed using point counts and structural vegetation measurement was taken at each point. Survey methods are designed to estimate bird densities as opposed to relative abundance by accounting for species detectability; detectability is estimated using distance and time of detection models. Three observers conducted bird surveys at 151 FQA plots (Floristic Quality Assessment) and 100 additional grid points within the CFLRP project area between May 19th and July 5th 2013. Focal species were Acadian Flycatcher, Bachman's Sparrow, Black-and-white Warbler, Blue-winged Warbler, Eastern Towhee, Eastern Wood-Pewee, Kentucky Warbler, Northern Bobwhite,

⁹ Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet, "Impacts-Jobs and Income" tab. Spreadsheet and directions available at <http://www.fs.fed.us/restoration/CFLR/submittingproposals.shtml#tools>.

Ovenbird, Pine Warbler, Prairie Warbler, Red-headed Woodpecker, Summer Tanager, White-eyed Vireo, Wood Thrush, Worm-eating Warbler and Yellow-breasted Chat.

A model is currently developed to predict density and relationship between density and vegetation structure and management. A graduate student has been recruited to work on the model with additional funding provided by the Northern Research Station. In addition to the point count survey in 2014, nocturnal surveys for Nightjars and monitoring of nesting success of focal species will be conducted.

Total number of bird detections by species on 253 and 102 point count surveys on the Mark Twain national Forest and Ozark National Forest, respectively during the breeding season in 2013.

Species	Total detections	
	MNTF N=253	ONF N=102
Acadian flycatcher	136	1
Bachman's sparrow	-	2
Black and white warbler	37	3
Brown-headed nuthatch	-	17
Blue-winged warbler	6	-
Eastern towhee	95	5
Eastern wood pewee	220	23
Kentucky warbler	21	10
Northern bobwhite	1	2
Ovenbird	144	6
Pine warbler	246	121
Prairie warbler	93	48
Red-headed woodpecker	70	6
Summer tanager	112	78
White-eyed vireo	34	21
Worm-eating warbler	59	7
Wood thrush	20	52
Yellow-breasted chat	227	1

6. FY 2013 accomplishments

Performance Measure	Unit of measure	Total Units Accomplished ¹⁰	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) ¹¹
Acres of forest vegetation established FOR-VEG-EST	Acres	252	4,425	CFKV CFVW
Acres of forest vegetation improved FOR-VEG-IMP	Acres	657	39,000	CFLN CFVW Stewardship Contracts
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	153.3	45,152	WFHF – 20,000 CFLN – 25,152
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	4,826	Integrated	CFLN CFTM CFHF
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	1,760	Integrated	CFHF CFTM Stewardship Contracts
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	3.84	Timber Sale Contracts	
Miles of existing high clearance system roads reconstructed RD-HC-RCNSTR	Miles	3.28	119,439	CFLN
Miles of high clearance system road improved RD-HC-IMP	Miles	3.28	Timber Sale Contracts	
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles	21.88	36,000	CFTM CFLN
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	526		
Volume of Timber Harvested TMBR-VOL-HVST	CCF	7445.7		CFTM
Volume of timber sold TMBR-VOL-SLD	CCF	25,446.4		CFLN CFTM
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	9,621		
Acres of wildland/urban	Acres			

¹⁰ Units accomplished should match the accomplishments recorded in the Databases of Record.

¹¹ Please use a new line for each BLI or type of fund used. For example, you may have three lines with the same performance measure, but the type of funding might be two different BLIs and CFLR/CFLN.

Performance Measure	Unit of measure	Total Units Accomplished ¹⁰	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) ¹¹
interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI				

7. **FY 2013 accomplishment narrative** (summarize key accomplishments and evaluate project progress) (please limit answer to three pages).

The Missouri Pine-Oak Woodland Restoration remained on schedule to meet its goals in 2013. The multi-party effort to meet the various individual treatment and monitoring goals continues to build momentum. The partnership treated over 8,600 acres in 2013 which brought the total acres treated to date to nearly 25,000 acres. As part of the project the MTNF sold 25,466 CCF of timber (primarily saw logs) in 2013 that are estimated to have generated 78.4 direct jobs in the 10 county area covered by the project. Fuels treatments in the area (9,621 acres) have begun to make a slight difference in the occurrence and severity of wildfire which was down in 2013 from the usual activity. Multi-party monitoring of sensitive birds and the collection of data from the 151 Floristic Quality Assessment plots indicate continued movement towards the desired conditions.

An additional area of concern is the lack of a significant biomass market in southern Missouri. Over the life of the project the Forest expects to make 850,000 green tons of biomass available. Currently this material is offered to timber purchasers as an optional item when they purchase saw logs. Our experience to date indicates that most purchasers do not take this material even at the low price of \$1/CCF. This material is then left in the woods to be felled and burned adding to the controversy with the Missouri Forest Products Association. The development of a viable small diameter market in Missouri would alleviate this problem and make use of an underutilized resource.

Despite the concerns identified above the CFLRP maintains broad support among our partners and adjacent land owners in the surrounding communities. The increased opportunity that the CFLRP represents for the restoration of a rare ecological community, the attainment of Forest Plan goals, the reduction in the threat of catastrophic wildfire while generating additional jobs and economic activity is significant.

8. **Describe the total acres treated in the course of the CFLR project** (cumulative footprint acres; not a cumulative total of performance accomplishments). What was the total number of acres treated?¹²

Fiscal Year	Total number of acres treated (treatment footprint)
FY13	8,601
FY10, FY11, FY12 and FY13 (as applicable- projects selected in FY2012 may will not have data for FY10 and FY11; projects that were HPRP projects in FY12, please include one number for FY12 and one number for FY13 (same as above))	24,785

¹² This metric is separate from the annual performance measurement reporting as recorded in the databases of record. Please see the instructions document for further clarification.

9. In no more than two pages (large landscapes or very active fire seasons may need more space), describe other relevant fire management activities within the project area (hazardous fuel treatments are already documented in Question #6):

None

10. Describe any reasons that the FY 2013 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)

The Mark Twain National Forest experienced a wet spring and several of the scheduled prescribed burns could not be implemented. In addition, limited markets for small diameter (<9" material) products continues to limit the number of acres that can be treated.

11. Planned FY 2015 Accomplishments

Performance Measure Code ¹³	Unit of measure	Planned Accomplishment	Amount (\$)
Acres of forest vegetation established FOR-VEG-EST	Acres	753	83,755
Acres of forest vegetation improved FOR-VEG-IMP	Acres	972	123,880
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	200	45,000
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	5,000	Integrated
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	2,000	Integrated
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	4	T.S.
Miles of road decommissioned RD-DECOM	Miles		
Miles of high clearance system road improved RD-HC-IMP	Miles	3.0	15,000 T.S.
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles	20	40,000
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	500	
Volume of Timber Harvested TMBR-VOL-HVST	CCF	8,000	
Volume of timber sold TMBR-VOL-SLD	CCF	25,000	
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	40,000	T.S.
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	10,000	150,000

¹³ Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2015 is available. Use actual planned funding if quantity is less than specified in CFLRP project work plan, and justify deviation from project work plan in question 13 of this template.

Performance Measure Code¹³	Unit of measure	Planned Accomplishment	Amount (\$)
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	5,000	75,000

12. Planned FY 2015 accomplishment narrative (no more than 1 page):

The FY 2015 program of work will continue to focus on awarding timber sale contracts, stewardship contracts and understory thinning contracts. Completion of NEPA for the Fremont and Pineknott East will be completed by this time authorizing additional treatment acres.

13. Describe and provide narrative justification if planned FY 2014/15 accomplishments and/or funding differs from CFLRP project work plan (no more than 1 page):