

**CFLR Project(Name/Number): Ozark Highlands Ecosystem Restoration/CFRL022**

**National Forest(s): Ozark-St. Francis National Forests**

**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**

<b>Fund Source – (CFLR Funds Expended<sup>1</sup>)</b>	<b>Total Funds Expended in Fiscal Year 2013(\$)</b>
CFLN	\$1,319,415
CFLN (Chief’s carryover funds)	\$52,325

<b>Fund Source – (Carryover funds expended (Carryover to in addition to CFLR/CFLN)<sup>2</sup> (please include a new row for each BLI))</b>	<b>Total Funds Expended in Fiscal Year 2013(\$)</b>
NFTM	\$115,000
NFVW	\$88,995
NFWF	\$18,093
WFHF	\$138,582

<b>Fund Source – (FS Matching Funds (please include a new row for each BLI)<sup>3</sup>)</b>	<b>Total Funds Expended in Fiscal Year 2013(\$)</b>
CMRD	\$63,728
CMTL	\$26,321 (\$5,667 reported in PAS)
CWKV	\$294,673
E6Z029	186,516 (Not tracked in PAS)
NFTM	\$53,607
NFVW	\$18,013
NFWF	\$135,756
WFHF	\$354,109

<b>Fund Source – (Funds contributed through agreements<sup>4</sup>)</b>	<b>Total Funds Expended in Fiscal Year 2013(\$)</b>
AGFC	\$55,960
Range Allotment Permittees	
Ozark Highland Trail Association	
Razorback Riders	
Friends of Lake Wedington	
Friends of White Rock	

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> This amount should match the amount of matching funds obligated in the PAS report.

<sup>4</sup> 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.

Fund Source – (Partner In-Kind Contributions <sup>5</sup> )	Total Funds Expended in Fiscal Year 2013(\$)
Arkansas Wildlife Federation Range Allotment Permittees Ozark Highland Trail Association Razorback Riders Friends of Lake Wedington Friends of White Rock	\$83,490

Fund Source – (Service work accomplishment through goods-for-services funding within a stewardship contract <sup>6</sup> )	Total Funds Expended in Fiscal Year 2013(\$)
National Wild Turkey Federation	\$536,742

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

The Arkansas Game and Fish Commission (ACFC) and the Nature Conservancy (TNC) continued work started in fiscal year 2012 under the Promoting Ecosystem Resiliency Thorough Collaboration grant in the Gene Rush and Scott Henderson Gulf Mountain Wildlife Management Areas. The National Park Service continued implementing glade restoration projects at the Buffalo National River. The Natural Resources Conservation Service (NRCS) funded conservation projects located in private lands. The activities carried out in those counties where the Collaborative Forest Landscape Restoration (CFLR) is located included the following:

- 3,027 ac of forest stand improvements;
- 5,633 ac of wildlife habitat restoration and maintenance;
- 9 miles of streambank restoration; and
- 3,211 ac of upland wildlife habitat work.

These projects were funded under the Environmental Quality Incentives Program (EQUIP) and Wildlife Habitat Incentive Program (WHIP). The investment in these projects added up to \$673,415.

Approved by (Forest Supervisor): \_\_\_\_\_

Approved by (Forest Supervisor): \_\_\_\_\_

<sup>5</sup> 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.

<sup>6</sup> 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 Plan<sup>7</sup>, 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 overall activities of planned management ignited fire projects are reducing the threat of wildfire and moving the project area towards the goal of being restored. We have achieved progress in performance measures of the 10 Year Comprehensive Strategy Implementation Plan.

The total five year history of fire occurrence in the project area shows an average of six fires per year burning approximately 100 acres each (33 fires for 3308 acres). The average acreage of wildfire size has increased. Strategy shifts in utilizing less direct attack methods to avoid placement of firefighters in hazardous terrain features, choosing line locations to reduce soil disturbance impacts and managing natural ignitions for multiple objectives has resulted in larger fires with less overall impacts. All fires occurring from natural ignition sources across the forest are considered for suppression management with multiple benefit objectives. Opportunities for fire management are limited as natural ignition as a fire cause occurs on only about 10% of our wildfires.

The majority of all fires on the Ozark-St. Francis National Forests are controlled during initial attack and there has been no statistical change in that percentage resulting from the work in the project area. Wildfires that have occurred on the forest where fuels treatments have been implemented burn with less intensity. No wildfires have occurred within the treated landscape of the project area. It is anticipated as the acreage treated with prescribe fire and mechanical methods to alter the fuels conditions in the project areas are completed we will experience the same benefits in the project area as well.

During fiscal year 2013 we treated 25054 acres of the landscape in the project area with prescribed fire accounting, for 53% of all burning on the Ozark-St. Francis National Forests. Acres of treatment in Wildland Urban Interface (WUI) account for 60% of the burning (15,021 acres) and the rest 40% (10,021 acres) Non WUI. No wildfires occurred in, or burned into areas having received fuels treatment activities in the project area. As activities continue and the footprint of treatment areas within the project boundaries increase, we anticipate seeing changed conditions resulting in wildfires having lower fire behavior characteristics and being more easily controlled. All of the treatments are moving the project area towards the desired conditions.

Wildfires that have occurred in the treatment area have required no post-fire recovery work.

Performance Measure	Units
Percent change from 10-year average for wildfires controlled during initial attack	No change
Percent change from 10 year average for number of unwanted human-caused wildfires	No change
Percent of fires not contained in initial attack that exceed a stratified cost index	0%
Number and percent of WUI acres treated that are identified in CWPPS or other application collaboratively developed plans	15033 acres 60%
Number and percent of non-WUI acres treated that are identified through collaboration consistent with the <i>Implementation Plan</i>	10021 acres 40%
Number of acres treated per million dollars gross investment in WUI and non-WUI areas	25033 acres
Percent of collaboratively identified high priority acres treated where fire management objectives are achieved as identified in applicable management plans or strategies	N/A
Number and percent of acres treated by prescribed fire, through collaboration consistent with the	25033 acres 100%

<sup>7</sup> 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).

<i>Implementation Plan.</i>	
Number and percent of acres treated by mechanical thinning, through collaboration consistent with the <i>Implementation Plan.</i>	0 acres 0%
Number of acres and percent of the natural ignitions that are allowed to burn under strategies that result in desired conditions	0 acres 0%
Number and percent of acres treated to restore fire-adapted ecosystems which are moved toward desired conditions	25033acres 100%
Number and percent of acres treated to restore fire-adapted ecosystems which are maintained in desired conditions	0 acres 0%
Number and percent of burned acres identified in approved post-wildfire recovery plans as needing treatments that actually receive treatments	0 acres 0%
Percent of burned acres treated for post-wildfire recovery that are trending towards desired conditions	N/A

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

**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 <sup>8</sup>
Commercial Forest Product Activities	18.6	44.7	\$994,671	\$2,127,251
Other Project Activities	4.8	6.2	\$151,019	\$200,176
<b>TOTALS:</b>	<b>23.4</b>	<b>50.9</b>	<b>\$1,145,690</b>	<b>\$2,327,427</b>

**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 <sup>9</sup>
Commercial Forest Product Activities	79.4	181.7	\$4,302,595	\$8,902,504
Other Project Activities	1.4	1.8	\$43,214	\$57,280
<b>TOTALS:</b>	<b>80.7</b>	<b>183.5</b>	<b>\$4,345,809</b>	<b>\$8,959,784</b>

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

CFLR funds benefit wildlife habitat for game and non-game species, improve stream and lake habitat, contribute to timber harvest and sales, and improve forest visitor's experience. As we reach desired forest conditions we can improve visitor's experience. Lake Wedington received approximately 31, 000 visitors in fiscal year 2013. The National Visitor Monitoring Results shows that in the Ozark-St. Francis National Forests on average visiting parties spend \$198 per trip.

Contracts funded under CFLR also help local economies. The community benefits of these funds will become evident in 2015 and 2016. CFLR funds were committed to identify the benefit to local economies from CFLR funded contracts. The agreement with the University of Arkansas will fund researcher and a student to conduct an economic impact study. This study is designed to measure county and state economic impact of CFLR funds invested in the Ozark Highlands Ecosystem Restoration project.

<sup>8</sup> 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>.

<sup>9</sup> 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>.

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

Multiparty monitoring was accomplished through grants and agreements with Arkansas Game and Fish Commission (AGFC), Arkansas Wildlife Federation (AWF), National Wild Turkey Federation (NWTf), The University of Arkansas (UA), Arkansas Tech University (ATU) and The Nature Conservancy (TNC). Monitoring consisted of game camera placement in key CFLR treatment areas by our partner AGFC, bird surveys, gobbler counts, vegetation monitoring, and stream monitoring. Cameras monitored wildlife habitat utilization in some of the treatment areas. The United State Geological Survey (USGS) Cooperative Fish and Wildlife Research Unit monitored the effects of prescribed burning treatments to the movement and nesting of female Eastern wild turkeys in the CFLR area. The monitoring is still ongoing and will continue until approximately March of 2014. During 2013, we monitored 38 bird plots, 48 vegetation macro-plots, Region 8 bird monitoring plots, and management indicator species. We also utilized game cameras to document wildlife habitat use.

The UA has been monitoring the effects of prescribed burning and wildlife stand improvement (WSI) treatments to wasps and dead and down old growth fossil chinquapin forests. Forest Service personnel monitored photo points before and after WSI treatments. The UA has been evaluating the colonization of macro invertebrates of area streams within the CFLR area through habitat improvements such as the addition of large woody debris additions. Photo points have indicated vegetative recovery of some of the areas in the Mill Creek Off-Highway Vehicle (OHV) trail area where watershed improvement fencing was constructed last fiscal year. Aquatic monitoring by AGFC over time after several dredging treatments of Shores Lake will be able to evaluate the change to the fisheries in the lake. Volunteers are monitoring location areas of concentrated feral hog presence and are and will continue to focus trapping efforts in those areas.

The UA together with the AGFC and the NWTf continued working on the turkey monitoring research. This year we captured 38 turkeys including 4 juvenile males. The 38 turkeys were fitted with GPS trackers and then released at trap sites. This research concluded in fiscal year 2013.

*Bird monitoring:* The Ozark-St. Francis National Forests is collaborating with the Ouachita National Forest and the Mark Twain National Forest to share bird monitoring data. All three forests are conducting similar bird monitoring techniques. The Nature Conservancy is collaborating with both forests in Arkansas conducting the same vegetation monitoring protocol. The Mark Twain will conduct similar vegetation monitoring protocol and will collect additional floristic data. Bearcat Bird Survey was conducted by AWF and ATU (Arkansas Tech University) consisting of 19 plots revisited in June. We are seeing some increases in early successional species, but the monitoring program is just starting and should not draw much inference. Bearcat Gobbler Count was conducted by AWF and NWTf consisted of 10 plots started in March through May and were visited twice per week. Just the second year but there was an increase in the number of birds heard from last year.

The NWTf, AWF, and AGFC are conducting research on Jake mortality in Bearcat Hollow, Gene Rush, and Piney Creek WMA. This past year 5 jakes were captured in Bearcat Hollow during the late winter months and a transmitter attached. These birds were followed initially by plane and then by ground personnel to determine condition of the bird. As of last report, 4 of the 5 jakes had succumbed to poaching, predation, or injuries from trapping.

*Turkey research:* Trapping began in early January of 2013 to deploy the 33 warranted replacements Platform Transmitter Terminals (PTT). In total we captured 33 adult females and 18 juvenile females while also capturing 21 juvenile males and 6 adult males. At the initiation of the nesting season all 33 females from 2013 were still alive and 15 from 2012.

The beginning of the 2013 nesting process was marked by large linear dispersal movements of 13 of the 33 marked females. Of the 13 birds that made large dispersal movements 8 were juveniles. We observed dispersals ranging from approximately 10 km to 80 km. The first nest incubation initiation date was on April 17, 2013. To date we have observed 34 nest attempts, 28 first nests and 6 renests, for females captured in 2013 and 6 nest attempts for females captured in 2012. Of the 33 females outfitted with PTTs 28 were observed to make an initial nest attempt. Two of the five females that were not observed to make a nest attempt were juveniles while two more were killed likely during the egg laying period. We have observed 5 successfully incubated nest attempts from the 28 first nest attempts. To date no re-nest attempts have been successful. Five females have been killed on the nest during incubation and one has been killed during brood rearing. Clutch sizes of successful nest average 9 eggs (SE=3.6, n=3), lower than the 2012 average of 9.7 eggs. We have had one transmitter failure to date.

Pre-nesting and nest vegetation sampling are currently ongoing and will be completed in early July 2013. Random Vegetation sampling as conducted in 2011 and 2012 has been initiated and will be completed prior to the end of July. Brood counts are currently ongoing and will be completed the first week of July.

We completed two survey periods during the month of March of which only one provided images due to multiple camera malfunctions. Turkeys were present at 4 of the 16 camera sites. The survey resulted in 1,544 total images including 119 images of turkeys (8%). This percentage appears low but cameras were not placed on wildlife openings where turkeys had been previously trapped that year. These trap sites were also in the areas of highest turkey use. When these 8 trap sites are included 3,367 total images were taken of which turkeys were present in 819 (21%). We counted 829 turkeys from the 819 images of which there were 52% hens, 28% jakes, 11% adult gobblers, 12% unknown, and 5% marked birds (e.g. leg band or transmitter). Abundance estimates will be made using n-mixture models but will require additional surveys before their accuracy can be evaluated (Royle et al. 2009). Accuracy and performance of the protocols will also benefit from additional surveys conducted in January and February of 2014. Early survey periods will capture larger multi-sex winter flocks as opposed to surveys during the break up of these winter flocks during March. Surveys in January and February when flocks cover less ground and are food stressed will also increase the detection of turkeys at baited camera sites.

*Aquatic monitoring:* Researchers from the University of Arkansas Department of Biological Science studied meiofauna colonization of submerged large wood (LW) in a gravelbed stream (36°09'45.59" N/94°26'9.82" W) to test the hypothesis that wood species and age influence meiofaunal assemblage and abundance. LW often enters streams when it is still alive and can be valuable to stream invertebrates as food and substrate. In an *in situ* experiment, logs from live and standing dead red oak *Quercus rubra* and loblolly pine *Pinus taeda* were secured in a pool in first order Chambers Springs, Arkansas and left undisturbed for 114 days, 24 October 2012 to 14 February 2013. Meiofauna were rinsed from the log surfaces, preserved, stained, identified, and counted. We found the highest densities of total, temporary, and permanent meiofauna as well as nematodes on live oak logs ( $P < 0.001$ ,  $P = 0.012$ ,  $P = 0.001$ , and  $P = 0.001$  respectively). Tardigrades were most abundant on oak, and ostracods on pine ( $P = 0.005$  and  $P = 0.013$ ), but neither showed a preference for wood age. Both the species and age of wood in streams may affect the meiofauna associated with woody debris.

*Socio Economic Monitoring:* The Ozark-St. Francis National Forests and the Ouachita National Forest started an agreement with the University of Arkansas at Monticello to conduct socio economic impact study. The project is expected to start in 2014. The study objectives are to:

- Estimate the economic impacts on the forest products industry and ultimately the regional economy due to increased harvest from the restoration project;

- Analyze employee compensations related to the restoration project and fine-tune the regional purchase coefficients thereby increasing the accuracy of economic impact;
- Estimate the local community impacts of employee compensations due to the restoration project; and
- Assess the long-term implications of the restoration project on the local communities.

## 6. FY 2013 accomplishments

Performance Measure	Unit of measure	Total Units Accomplished <sup>10</sup>	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>11</sup>
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres			
Acres of forest vegetation established FOR-VEG-EST	Acres	251	47,374	CWKV
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,176.5	67,680 30,420 42,431	CFLN NFVW CWKV
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	3,328.2	200,855 73,613 3,200	CFLN NFVW NFWF
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	15,998	10,920 16,800	CFLN Partner Match
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	33	194,222 2,975	CFLN NFVW
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	566	92,500 47,753	CFLN NFWF
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	20.5	1,050 30,535 11,100	CFLN NFWF Partner Match
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	56,886.8	456,707 54,450 204,868 576,242	CFLN NFWF CWKV Partner Match
Acres of rangeland vegetation improved RG-VEG-IMP	Acres	1,941.8	30,200 37,050	NFRG Partner Match
Miles of high clearance system roads receiving maintenance	Miles	68.8	17,015 29,280	CFLN CMRD

<sup>10</sup> Units accomplished should match the accomplishments recorded in the Databases of Record.

<sup>11</sup> 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 <sup>10</sup>	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>11</sup>
RD-HC-MAIN				
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	111	28,534 56,205	CFLN CMRD
Miles of road decommissioned RD-DECOM	Miles			
Miles of passenger car system roads improved RD-PC-IMP	Miles		186,516	E6Z029
Miles of high clearance system road improved RD-HC-IMP	Miles			
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	.5	55,000	CFLN
Miles of system trail maintained to standard TL-MAINT-STD	Miles	93.4	60,000 23,216 30,000	CFLN CMTL Partner Match
Miles of system trail improved to standard TL-IMP-STD	Miles	4.6	3,150 3,105 5,000	CFLN CFTL Partner Match
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	2,911	59,785 10,073	CFLN NFTM
Volume of Timber Harvested TMBR-VOL-HVST	CCF			
Volume of timber sold TMBR-VOL-SLD	CCF	35,381	124,322 158,534	CFLN NFTM
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons			
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	10,021.5	196,965	WFHF
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk	Acres	15,033.1	295,726	WFHF



Performance Measure	Unit of measure	Total Units Accomplished <sup>10</sup>	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>11</sup>
of catastrophic wildland fire FP-FUELS-WUI				
Number of priority acres treated annually for invasive species on Federal lands SP-INVSpe-FED-AC	Acres			
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres			

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

*Timber management:* On the Ozark-St. Francis National Forests timber is cut to balance ecosystem and to restore watersheds. Historical records show that most of the Ozark-St. Francis National Forests was in oak/pine woodlands and pine/bluestem savannahs. The timber harvest along with prescribed burning helps to maintain these ecosystems. The combination of timber harvest and prescribed burning also helps to maintain early successional forest habitats and understory growth of wildflowers and native grasses that produce habitat for pollinators. Timber harvest improves ecosystem conditions by decreasing the number of stems per acre on the landscape and increasing native ground cover vegetation. Timber was harvested through sale contracts, stewardship contracts and stewardship agreements.

*Prescribed Burning:* Prescribed burning improves the overall conditions of the forest for species that need a grass understory. We do all of our prescribed burning not just for fuel reduction but in areas to improve wildlife habitat conditions. The prescribed burning is done utilizing hand crews and aerial ignition to accomplish burning on a landscape level. Burns are done with a mosaic pattern with different intensities in different areas of the burn. Some of these burns are used to establish and maintain native grass fields. These native grass fields are important habitat for some wildlife species. The prescribed burning is creating woodland conditions across the landscape. These conditions are important in the fire adapted ecosystems in the Ozarks to bring our native flowering plants that are utilized by native pollinators. In the areas where bats are found on the forest, fire is helping to create and maintain feeding areas for Indiana and gray bats.

*Non-Native Terrestrial Species Control:* The problem of increase feral swine herds has become very noticeable in the forest. Feral swine eat and kill native plants, predate ground nesting bird eggs including turkeys, compete for habitat with native mammal species, destroy riparian areas, increase sediment and erosion rates into area streams and can spread diseases to domestic swine and humans. Volunteers assisted with the eradication process. Forest Service (FS) personnel in cooperation with Arkansas Game and Fish Commission (AGFC) and the Animal and Plant Health Inspection Service (APHIS) also trapped feral swine with large open traps baited with corn and apples. Blood samples were taken from trapped hogs and sent to APHIS to test for diseases. Game cameras were set up to detect the presence and time of feral swine in areas. Eighteen hogs that would have produced 28 piglets were trapped by FS/AGFC personnel. Volunteers trapped 32 hogs that would have produced 42 piglets. It is expected that there are still large herds in the forest, but this project helped to control some of the invasive population. The feral swine problem will continue to exist. However, cooperative projects and new technology will help maintain control of this invasive species.

*Lake Habitat Restoration:* The purpose of this project was to improve the aquatic and recreational habitat at the 80 acre Shores Lake through sediment removal. The lake has an estimated silt deposition of 4-6 feet in depth, with an estimated 136,000 cubic yards of silty clay with coarse sand and some pebbles silt deposition. The lake has several extremely shallow areas with several silt islands that are now inaccessible to boaters, swimmers, fisherman, which also creates poor aquatic habitat as well. The swim beach area and the cove with the fishing launch pad is very shallow and almost dry. The dammed area of the lake still has good depth. The project will be funded over multiple years utilizing the Collaborative Forest Landscape Restoration Project (CFLRP) funding initiative. A contract was issued for the sediment removal for the first year. A short term authorization permit from Arkansas Department of Environmental Quality (ADEQ) was received for the project work. A small Ellicott SP810 Mudcatt dredge (launched by a crane) was used due to inaccessibility issues. A pipeline was constructed to a proposed parking lot site near the campground. The material was pumped from the lake to the spoil site, where it was allowed to sit and decant, or drain water. Weather, turbidity and water depth measurements were taken daily. The silt sand material will be recycled for road and camp pad projects once it is completely dry. Although the project will take over 5 years to complete, it is expected that the recreational and fisheries habitat in the lake will be positively impacted by this project. Over 30 years of sediment inflow from the surrounding mountains has built up. Through the CFLRP program, this lake will be able to maintain its prized fisheries and recreational values. The first year of sediment removal was a success and this project was the first of its kind on the Ozark-St. Francis National Forests.

*Wildlife Habitat Improvement:* The AGFC and the NWTf worked to maintain early successional habitat in wildlife openings and fields in the White Rock & Wedington Wildlife Management Areas. The forest has less than 5% of this type of habitat and the Boston Mountain Ranger District has less than 2% of this type of critical wildlife habitat. All liming, fertilizing, disking and seeding work was completed either by USFS and AGFC personnel or through contracts. The AGFC funded fertilizer, lime and portion of the seed. The USFS funded the seed, a brush hogging contract and a hydro-axe contract. Some of the openings or fields needed hydro-axing or brush hogging due to woody encroachment. The NWTf provided cooperators signs and some gates through the Arkansas State Superfund program. Approximately 535 acres and ten gates were installed through combined cooperative efforts. The areas provide early successional habitat for a variety of wildlife species, such as: deer, turkey, quail, bear, bats, neotropical migratory birds and small game. These areas also provide native pollinator habitat. These areas provide key open habitat in overall closed canopy forest conditions.

Wildlife habitat improvement was also accomplished at the Wedington unit using stewardship contracting. The purpose of this project was to improve the hardwood and mixed hardwood/shortleaf pine woodland forest conditions on the Wedington unit. Open woodlands create habitat diversity in an overcrowded, closed canopy forest. This will enhance wildlife species diversity as well. The objective will be to eventually reach an open, oak-woodland condition with a park like setting, as called for in the Ozark-St. Francis National Forests Revised Land and Resource Management Plan. These areas are the main public land in northwest Arkansas and serve a population of over 350,000. The area is highly used for recreational activities such as hunting, horseback riding, bike riding, hiking and nature viewing. The wildlife stand improvement project was completed and will continue to be completed through multiple tools-through stewardship contracts and regular contracts. Work will be with chainsaws. All trees less than 10 inch diameter at breast high (DBH) will be cut except preferred wildlife trees, such as: serviceberry, dogwood, black cherry. The preferred leave trees will be white oak, hickory and red oak. Trees will be left down and the area will be burned in two to three years. Through utilizing stewardship contracting, the Wedington unit will be receiving much needed watershed, forest health and wildlife habitat improvement treatments that trade goods for services. This allows more funding to stay within the project area to accomplish more work on the ground. It is expected that once the work proceeds, there will be many benefits. We anticipate an increase in wildlife use and availability of habitat, especially for early successional species.

Opportunities such as nature viewing, hiking, horseback riding, hunting, etc. will also increase as the area will have more open habitat. Before treatment the fire class condition was III, after treatment it will be moved toward a class II and after prescribed burning, it will be in a condition class I and will be maintained in that condition. It is expected that different species of wildlife will increase the use of the areas (deer, turkey, neotropical migratory birds). It is expected that the open woodland conditions will increase wildlife species diversity through time as there is very little of this type of habitat in the area. It is expected that a flush of herbaceous forbs will return where there was little to none prior to the project.

*Woodland Restoration:* Past forest management practices have resulted in overstocked stands, altered species composition and increase in canopy closure in areas that support fire tolerant habitat such as woodlands. These changes have affected the resiliency of the forest and have caused a decline in species richness and diversity. The desired condition is an open, oak-woodland condition with a park-like setting, as called for in the Ozark-St. Francis National Forests Revised Land and Resource Management Plan. Woodland restoration was accomplished by prescribing wildlife stand improvement treatment. The work included cutting all trees less than 10 inch DBH, except trees preferred for wildlife such as serviceberry, dogwood, and black cherry. The preferred leave trees were white oak, hickory and red oak. Trees were left on site to be burned in two to three years.

**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?<sup>12</sup>

<b>Fiscal Year</b>	<b>Total number of acres treated (treatment footprint)</b>
FY13	64,917
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))	FY12: 48,528 FY13: 64,917

**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):

Wildfire response for the districts having the CFLR project is budgeted at a level to allow for adequate resources to respond to all wildfires. This funding inclusive of salaries, training equipment cost and to fund wildfire prevention programs in the local area.

Management of natural ignition wildfires for multiple objectives is considered as a suppression strategy at each fire occurrence. Opportunities for fire management with multiple benefits are limited on the Ozark-St. Francis National Forests. The land ownership pattern of multiple private inholdings creates spatial limitations, and with only about 10% of all wildfires having natural ignition as a source of cause are some of the limiting factors to allowing fires to be reintroduced in to the landscape. This year no unplanned ignitions were managed for multiple benefits.

Suppression tactics to reduce risk to firefighters and the public are being employed. Fire size in considered less important during initial attack and using methods to control the fire that result in less impact to the landscape are being favored. Methods such as using existing barriers, choosing line locations placement more favorable for fire control are

<sup>12</sup> 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.

examples. There were no cost changes due to different management of the wildfires. All fires were controlled at initial attack and remained relatively small resulting in no Burned Area Emergency Response (BAER) treatments.

**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)

Project implementation during fiscal year 2013 went better than fiscal year 2012. We accomplished project layout in and contract preparation during the first two quarters of the fiscal year. Out contracts included service contracts and indefinite delivery indefinite quantity (ID/IQ) contracts. We were able to accomplish our planned targets on time. One problem we did face was with the non-native invasive species (NNIS) treatments and native grass restoration; we had an unexpected new NNIS (thistle) show up. We had to treat the new NNIS with the hopes that the restoration would be successful. Therefore, we treated more acres of NNIS than originally planned.

### 11. Planned FY 2015 Accomplishments

Performance Measure Code <sup>13</sup>	Unit of measure	Planned Accomplishment	Amount (\$)
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres		
Acres of forest vegetation established FOR-VEG-EST	Acres	100	12,000
Acres of forest vegetation improved FOR-VEG-IMP	Acres	1000	154,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	1,775	330,594
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	36,000	73,300
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	310	243,968
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	20	220,000
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	6	7,685
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	4,830	691,952

<sup>13</sup> 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 Code <sup>13</sup>	Unit of measure	Planned Accomplishment	Amount (\$)
Acres of rangeland vegetation improved RG-VEG-IMP	Acres		
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	50	18,800
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	150	56,400
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		
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	1	107731
Miles of system trail maintained to standard TL-MAINT-STD	Miles	20	30,000
Miles of system trail improved to standard TL-IMP-STD	Miles	2.1	15,000
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	300	3,000
Volume of Timber Harvested TMBR-VOL-HVST	CCF	1,125	24,000
Volume of timber sold TMBR-VOL-SLD	CCF	5,000	165,800
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons		
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre		

Performance Measure Code <sup>13</sup>	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		
Number of priority acres treated annually for invasive species on Federal lands SP-INVSP-E-FED-AC	Acres		
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres		

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

Accelerated work will continue predominately in the Wedington Stewardship area and also on the main division. Watershed improvement work will continue in the Mill Creek OHV area due to the success and natural re-vegetation of the area from the past two years of accelerated restoration. The area still has many miles of illegal trails that run into Mill Creek that need to be obliterated and closed. Shores Lake dredging will continue to improve the aquatic and recreational habitat and will hopefully be more successful than previous years due to the potential of an IDIQ contract and the availability of more funding for the project. This will reduce mobilization fees from contractors so more work can be done on the ground. The much needed wildlife stand improvement will continue throughout the Wedington Unit, but also in the stewardship area. Roadside NNIS spraying will move to the main division in the Spirits Project/watershed target 5 dominant woody NNIS species. Other NNIS activities will include the continued spraying and eradication of fescue from Wedington #12 to eventually restore this overgrown abandoned grazing allotment to a warm season native grass prairie that will be more beneficial for wildlife habitat and can be easily viewed from the road. This will also improve rangeland conditions for the area. This area could eventually also be a prime wildlife and native plant pollinator, wildflower viewing area. The crossing at Cripple Creek branch was surveyed and it was determined it was impassable to several species of native fish. Wildlife habitat improvement work will utilize a combination of wildlife pond habitat improvement, wildlife stand improvement and wildlife opening improvement and maintenance. Early successional habitat is extremely lacking on the main division of the restoration area-it is vital to maintain and improve these existing early successional habitats for a variety of wildlife species. Stream habitat improvement will include the addition of large woody debris into Spirits Creek to restore lost pool habitat and to improve both aquatic and herptofauna habitat in the area. Trail maintenance and improvement will continue in areas we have worked on the last two years. Many of these trails are along riparian habitats and continue to need improvement or maintenance in order to reduce sedimentation into area streams and lakes.

**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): We do not anticipate any changes in accomplishments and/or funding during fiscal year 2014/15.