# CFLR Project (Name/Number): Ozark Highlands Ecosystem Restoration/CFLR022 National Forest(s): Ozark-St. Francis National Forests

# 1. CFLRP Expenditures, Match, and Leveraged Funds:

#### a. FY20 CFLN and Matching Funds Documentation

Fund Source – (CFLN Funds Expended)	Total Funds Expended in Fiscal Year 2020
CFLN20	\$1,425,336

This amount should match the amount of CFLN dollars obligated in the FMMI CFLRP expenditure report. Include prior year CFLN dollars expended in this Fiscal Year. CFLN funds can only be spent on NFS lands.

Fund Source – (FS Matching Funds)	Total Funds Expended in Fiscal Year
	2020
CMRD	\$120,300
CWKV	\$187,421
ER22	\$14,084
NFHF	\$260,093
NFTM	\$346,767
NFVW	\$429,259
NFWF	\$245,415

This amount should match the amount of matching funds in the FMMI CFLRP expenditure report, *minus* any partner funds contributed through agreements (such as NFEX, SPEX, WFEX, CMEX, and CWFS) listed below. Per the updated <u>Program Funding Guidance</u>, federal dollars spent on non-NFS lands (for example, through Wyden authority) may be included here if aligned with CFLRP proposal implementation within the CFLRP landscape. NOTE: In FY20, projects received their allocation only in CFLN – there are no "Washington Office funds" to report.

Fund Source – Partner Match	In-Kind Contribution or Funding Provided?	Total Estimated Funds/Value for FY20	Description of CFLRP implementation or monitoring activity	Where activity/item is located or impacted area
Arkansas Game and Fish Commission	In-kind contribution □ Funding Budget Line Item, if relevant: <sup>1</sup>	\$7,500	Brush hogging to maintain open land conditions and reduce fuel loading for wildlife habitat	<ul> <li>☑ National Forest</li> <li>System Lands</li> <li>□ Other lands within</li> <li>CFLRP landscape:</li> </ul>
The Nature Conservancy	☑ In-kind contribution □ Funding Budget Line Item, if relevant: <sup>1</sup>	\$18,000	Monitoring of vegetation plots, co-op prescribed burning, mechanical treatments, etc.	<ul> <li>☑ National Forest</li> <li>System Lands</li> <li>□ Other lands within</li> <li>CFLRP landscape:</li> </ul>

<sup>&</sup>lt;sup>1</sup> If funding from partner(s) is captured in USFS database (such as as NFEX, SPEX, WFEX, CMEX, or CWFS), please provide Budget Line Item here. See CFLRP FMMI expenditure report for reference.

Fund Source – Partner Match	In-Kind Contribution or Funding Provided?	Total Estimated Funds/Value for FY20	Description of CFLRP implementation or monitoring activity	Where activity/item is located or impacted area
USDA NRCS	☑ In-kind contribution	\$1,536,899	Financial & Technical Assistance to Private	National Forest System Lands
	□ <b>Funding</b> Budget Line Item, if relevant: <sup>1</sup>		Habitat Improvement Work	☑ Other lands within CFLRP landscape:

Total partner in-kind contributions for implementation and monitoring of a CFLR project across all lands within the CFLRP landscape.

Service work accomplishment through goods-for services funding within a stewardship contract (for contracts awarded in FY20)	Totals
Total <u>revised non-monetary credit limit</u> for contracts awarded in FY20	\$360,303
Revenue generated through Good Neighbor Agreements	Totals
	\$0

<u>Revised non-monetary credit limits</u> should be the amount in contract's "Progress Report for Stewardship Credits, Integrated Resources Contracts or Agreements" in cell J46, the "Revised Non-Monetary Credit Limit," as of September 30. Additional information on the Progress Reports is available in CFLR Annual Report Instructions document. Information for contracts awarded prior to FY20 were captured in previous annual reports. <u>Revenue</u> <u>generated from GNA</u> should only be reported for CFLRP match if the funds are intended to be spent within the CFLRP project area for work in line with the CFLRP project's proposed restoration strategies and in alignment with the CFLRP authorizing legislation

**b.** *(If needed)* **Describe additional leveraged funds in your landscape in FY2020**. Leveraged funds refer to funds or inkind services that help the project achieve proposed objectives but do not meet match qualifications. *NOTE:* <u>Work on</u> <u>non-National Forest System lands previously reported in this section should now be reported under Partner Match</u>. Additional leverage might include investments in restoration equipment, research (not monitoring), and planning funds.

The Ozark-St. Francis National Forests, Ouachita National Forest, Natural Resources Conservation Service (NRCS) in Arkansas, and Arkansas Department of Agriculture – Forestry Division are currently working under two Joint Chiefs' Landscape Restoration Partnerships. Other partners involved with this project include Arkansas Game and Fish Commission and The Nature Conservancy. The project landscape included the following Arkansas counties in the CFLR project landscape: Benton, Conway, Crawford, Franklin, Johnson, Madison, Newton, Pope, Searcy, Van Buren, and Washington. NRCS funded conservation practices in the amount of \$1,536,899. See table above for all NRCS expenditures on private property within the landscape.

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.

During fiscal year (FY) 2020, we treated a total of 22,970 acres of the landscape in the CFLR project area with prescribed fire (a decrease in 14,265 acres treated in FY19). Total acres of treatment in the Wildland Urban Interface (WUI) account for approximately 93 percent (21,293 acres) and approximately 7 percent (1,677 acres) were Non WUI. No wildfires occurred in, or burned into areas having received fuels treatment activities in the CFLR project. 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 hazardous fuels treatments including prescribed fire, mechanical, manual, and chemical methods account for 28,678 acres of the landscape in FY20. To date, we have surpassed our life target requested in the 2012 proposal for acres of treatment in the WUI. All of the treatments described, herein, are assisting in moving the project area towards desired conditions. The entire Ozark-St. Francis National Forests are considered to be within a fire-adapted ecosystem.

FY2020 Overview	
FY20 Activity Description (Agency performance measures)	Acres
Number of acres treated by prescribed fire	22,970
Number of acres treated by mechanical thinning	2,118
Number of acres treated by chemical thinning	3,005
Number of acres treated by manual methods	585
Number of acres of natural ignitions that are allowed to burn under	0
strategies that result in desired conditions	
Number of acres treated to restore fire-adapted ecosystems which are	28,678*
maintained in desired condition	
Number of acres mitigated to reduce fire risk	28,678

\*All of the project area is within a fire adapted ecosystem

**Please provide a narrative overview of treatments completed in FY20**, including data on whether your project has expanded the pace and/or scale of treatments over time, and if so, how you've accomplished that – what were the key enabling factors?

- **How was this area prioritized for treatment?** What kinds of information, input, and/or analyses were used to prioritize? Please provide a summary or links to any quantitative analyses completed.
  - The Ozark Highlands CFLR project area was originally chosen because there was a combined effort between multiple agencies to restore the oak-hickory and oak-pine ecosystems as far back as 2002. These ecosystems had been reduced to closed canopy stands with an understory dominated by shrubs, poison ivy, and Virginia creeper. Pre-treatment stem densities average 300-1,000 stems per acre as opposed to the 38-76 stems per acre recorded in Government Land Office (GLO) records in the 1800's. Oak regeneration was lacking. Plant diversity had declined and wildlife habitat was degraded. The red oak borer and oak decline had affected over a million acres in the Ozarks since 2000; 48,000 acres in the CFLR project area. In some areas, tree canopy had been severely reduced or eliminated. This had greatly impacted sustainability of our oak-hickory and oak-pine ecosystems.
  - According to our vegetation monitoring results, which can be found below in this report, we are moving in the direction of our desired condition over much of the CFLR project area.
  - The key enabling factors were collaboration from our partners to achieve results and to monitor those results, as well as funding to increase capacity attained through this CFLR project and our Joint Chiefs' Landscape Restoration Partnership - Western Arkansas and SE Oklahoma Woodland Restoration Project.
- **Please tell us whether these treatments were in "high or very high wildfire hazard area** from the "wildfire hazard potential map" (<u>https://www.firelab.org/project/wildfire-hazard-potential</u>)
  - Were the treatments in **proximity to a highly valued resource** like a community, a WUI area, communications site, campground, etc.?
    - Most of the CFLR project area is not within high or very high wildfire potential areas; however, there
      are very small patches of high wildfire areas spaced across the treatment areas.
    - In FY 20, 93 percent of our hazardous fuels treatments were within a WUI area.
    - The Wedington Unit (Boston Mountain Ranger District) is considered the main public land in northwest Arkansas and serves a population of over 350,000. This area is highly used for recreational activities such as hunting, horseback riding, bike riding, hiking, and nature viewing. The Wedington Unit has received multiple hazardous fuel reduction treatments during this CFLR project.

- What did you learn about the interaction between treatment prioritization, scale, and cost reduction? What didn't work? Please provide data and further context here.
  - Vegetation monitoring has indicated that combined treatments for the CFLR project have been effective at shifting the vegetation communities and increase species diversity. Specifically, in areas where timber harvest or midstory removal is combined with multiple entries of prescribed fire, the treated vegetation community is meeting the project-scale objectives. Prescribed fire alone is slowly moving the vegetation conditions toward the desired condition, but it is not clear at this stage if multiple prescribed fire entries alone will completely return the stands to the desired condition or how long that may take. Data from our R8 bird surveys are clear that different species of migratory birds prefer different habitats throughout the year; thus, landscape scale treatments are important to support and create these mosaic habitat types.

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



Figure 1 Restored oak woodland after multiple treatments on the Wedington Unit within the CFLR project area.



Figure 2 Restored pine/oak woodland within the CFLR project area.

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Category	<u>\$</u>
FY2020 Wildfire Preparedness. <sup>2</sup>	\$390,788 (Unit) \$69,173 (Project)
FY2020 Wildfire Suppression. <sup>3</sup>	\$0
The cost of managing fires for resource benefit if appropriate (i.e. full suppression versus managing)	\$0
FY2020 Hazardous Fuels Treatment Costs (CFLN)	\$276,230
FY2020 Hazardous Fuels Treatment Costs (other BLIs)	\$260,093

How may the treatments that were implemented contribute to reducing fire costs? If you have seen a reduction in fire suppression costs over time, please include that here.

All the treatments implemented within the CFLR project area are designed to create more open woodland desired conditions, thereby reducing fire suppression costs by reducing fuel loading through thinning, prescribed fire, and other chemical and mechanical means.

Have there been any assessments or reports conducted within your CFLRP landscape that provide information on cost reduction, cost avoidance, and/or other cost related data as it relates to fuels treatment and fires? If so, please summarize or provide links here:

No reports have been conducted within the CFLR project area landscape on cost reduction, cost avoidance, and/or other cost related data as it relates to fuel treatment and fires. There have been vegetation surveys conducted within the CFLR

<sup>&</sup>lt;sup>2</sup> Include base salaries, training, and resource costs borne by the unit(s) that sponsors the CFLRP project. If costs are directly applicable to the project landscape, describe full costs. If costs are borne at the unit level(s), describe what proportions of the costs apply to the project landscape. This may be as simple as Total Costs X (Landscape Acres/Unit Acres).

<sup>&</sup>lt;sup>3</sup> Include emergency fire suppression and BAER within the project landscape. Describe acres of fires contained and not contained by initial attack. Describe acres of resource benefits achieved by unplanned ignitions within the landscape. Where existing fuel treatments within the landscape are tested by wildfire, summary and reference the fuel treatment effectiveness report.

project area which conveys approximate fuel loading and fuel modeling which could also be derived from this data. Please see the link in the report below for the vegetation monitoring data.

# When a wildfire interacts with a previously treated area within the CFLR boundary:

#### No wildfires occurred within the CFLR boundary in FY20.

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

- Please describe if/how partners or community members engaged in the planning or implementation of the relevant fuels treatment.
- Did treatments include coordinated efforts on other federal, tribal, state, private, etc. lands within or adjacent to the CFLR landscape?
- What resource values were you and your partners concerned with protecting or enhancing? Did the treatments help to address these value concerns?
- Did the treatments do what you expected them to do? Did they have the intended effect on fire behavior or outcomes? Please include a brief description.
- What is your key takeaway from this event what would you have done differently? What elements will you continue to apply in the future?
- What <u>didn't</u> work as expected, and why? What was learned?
- Please include the costs of the treatments listed in the fuels treatment effectiveness report: how much CFLR/CFLN was spent? How much in other BLI's were spent? If cost estimates are not available, please note and briefly explain.

# When a wildfire occurs within the CFLR landscape on an area <u>planned</u> for treatment but not yet treated:

- Please include:
  - Acres impacted and severity of impact
  - Brief description of the planned treatment for the area
  - Summary of next steps will the project implement treatments elsewhere? Will they complete an assessment?
  - Description of collaborative involvement in determining next steps.

# Please include acres of fires contained and not contained by initial attack and acres of resource benefits achieved by unplanned ignitions within the landscape, and costs.

- Include expenses in wildfire preparedness and suppression, where relevant
- Include summary of BAER requests and authorized levels within the project landscape, where relevant

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 <u>here</u>.

For the TREAT analysis, assumptions had to be made for direct full and part-time jobs directly supported.

#### FY 2020 Jobs Supported/Maintained (CFLN <u>and matching</u> funding):

FY 2020 Jobs Supported/Maintained	Jobs (Full and Part- Time) (Direct)	Jobs (Full and Part- Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Timber harvesting component	21	29	\$1,277,438	\$1,694,044
Forest and watershed restoration component	34	53	\$312,055	\$994,765

FY 2020 Jobs Supported/Maintained	Jobs (Full and Part- Time) (Direct)	Jobs (Full and Part- Time) (Total)	Labor Income (Direct)	Labor Income (Total)
Mill processing component	29	74	\$2,012,183	\$4,453,859
Implementation and monitoring	34	46	\$2,277,226	\$2,739,985
Other Project Activities	1	2	\$68,234	\$94,684
TOTALS:	120	203	\$5,947,136	\$9,977,337

#### 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).

The results of our economic analysis completed by the University of Arkansas at Monticello reported that commercial timber production used in support of restoration activities provided for 50 percent of the CFLR project's benefits. Local contractors, collaborators, and partners with physical addresses within the Ozark Highlands Region were found to spend a significantly greater percentage of their project expenditures within the Ozark Highlands Region than those outside of the region. The CFLR project contributes to the community in several ways. Some of the contracts are directly awarded to local contractors. Large and small purchases were made throughout the CFLR community area. The economic report can be found here: https://usdagcc.sharepoint.com/sites/fs-fm-

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
Sustained jobs in the Ozark Highlands	Local direct spending and timber produced from the Ozark Highlands Region sustained 139 jobs in 2014.	See link in description above
Sustained jobs nationally	The Ozark Highlands CFLR Project supported 245 jobs nationally with an annual average employee compensation of \$42,584 which is 87% of the national average.	See link in description above
Local and national benefit-cost ratio	Every \$1 spent locally returned \$1.1 in the local economy in 2014. Every \$1 invested in the CFLR project created \$2.1 in the national economy in 2014.	See link in description above
Relationship building/collaborative work	The Ozark Ouachita Highlands Collaborative was formed consisting of 12 organizations and state and federal agencies all working to support forest and woodland restoration. The collaborative continues to grow and assist the two national forests (Ozark and Ouachita) with their CFLR and Joint Chiefs' projects.	

5. Based on your project monitoring plan, **describe the multiparty monitoring process.** (Please limit answer to two pages). *Consider:* 

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 (U of A), Arkansas Tech University (ATU), and The Nature Conservancy (TNC). Established Forest Service protocol is being used to conduct all monitoring and evaluation of the CFLR project area. Site preparation activities within the CFLR project area are having a positive effect on the overall forest health of the area, by re-establishing new growth in forest stands in place of aging and overstocked stands. Timber harvest continues to have an overall positive effect on the local economy, by providing sources of employment and revenue to the local workforce.

R8 Bird Surveys were revisited in June by ranger district personnel consisting of 49 total plots with 20 of them being within the CFLR project area. We are seeing some changes in species, but the monitoring program is still ongoing.

Ginseng monitoring is conducted annually by Forest Service personnel to assess population trends at given point locations.

Anabat surveys were conducted by Forest Service personnel to monitor bat populations over time. Anabat surveys and mist net surveys were conducted for Indiana bat by Forest Service, US Fish and Wildlife Service, and Arkansas State University personnel.

Christmas bird counts were done in early January with approximately five (5) groups consisting of ATU students and faculty volunteers, and Forest Service personnel conducting a one (1) day survey to assess population trends.

Monitoring consisted of game camera placement in key CFLR treatment areas by our partner AGFC. Cameras monitored wildlife habitat utilization in some of the treatment areas. The US Geological Survey Cooperative Fish and Wildlife Research Unit monitored effects of prescribed burning treatments to movement and nesting of female Eastern wild turkeys in the CFLR project area. The monitoring was completed August of 2014. The U of A has been monitoring effects of prescribed burning and wildlife stand improvement (WSI) treatments to wasps and dead and down old growth fossil chinquapin forests. Other monitoring activities have included vegetative photo points before and after WSI treatments through force account. The U of A has been evaluating colonization of macro invertebrates of area streams within the CFLR project area through habitat improvements such as addition of large woody debris. Photo points have indicated vegetative recovery of some of the areas in the Mill Creek Off Highway Vehicle trail area where watershed improvement fencing was constructed three (3) years ago. Aquatic monitoring by AGFC over time after several dredging treatments of Shores Lake will be able to evaluate change to fisheries in the lake.

Bearcat Bird Surveys were conducted by AWF and ATU consisting of 19 plots revisited in June of 2020. We are seeing some increases in early successional species.

In 2015, we collected plant community monitoring data from 63 permanent macroplots on the Big Piney and Pleasant Hill Ranger Districts in the Ozark-St. Francis National Forests. These data, along with data from 64 macroplots sampled in 2014 were included in the 2017 plant community monitoring report which can be found here: https://usdagcc.sharepoint.com/sites/fs-fm-

density was still much higher than desired in 2014-2015 and increased significantly since 2007-2009, from an average of 1,095 stems/acre to 1,721 stems/acre (57 percent increase). These results represent changes for the national forests as a whole. Future analyses will assess progress towards desired community composition within the national forests.

In June of 2020, vegetation data was collected from half of the established permanent monitoring plots. The other half of permanent monitoring plots will be surveyed in June of 2021 and that data will be analyzed by TNC and organized into another future plant community monitoring report.

#### 6. FY 2020 Agency performance measure accomplishments:

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs). <sup>4</sup>
Acres of forest vegetation established FOR-VEG-EST	Acres	769*	\$14,189
Acres of forest vegetation improved FOR-VEG-IMP	Acres	3,304	\$95,160
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	1,490*	\$74,935
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	17,052*	\$10,000
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W- RSRC-IMP	Acres	2,781*	\$42,000
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	101	
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	0.5*	
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	30,493*	
Acres of rangeland vegetation improved RG-VEG-IMP	Acres	0*	
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	89*	
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	103	\$89,937
Miles of road decommissioned RD-DECOM	Miles	0*	
Miles of passenger car system roads improved RD-PC-IMP	Miles	0	
Miles of high clearance system road improved RD-HC-IMP	Miles	0	
Road Storage While this isn't tracked in the USFS Agency database, please provide road storage miles completed if this work is in support of your CFLRP restoration strategy for tracking at the program level.	Miles	0	
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	1*	\$45,898
Miles of system trail maintained to standard TL-MAINT-STD	Miles	64*	\$70,000
Miles of system trail improved to standard TL-IMP-STD	Miles	0*	
Miles of property line marked/maintained to standard LND- BL-MRK-MAINT	Miles	0	
Acres of forestlands treated using timber sales TMBR-SALES- TRT-AC	Acres	869	
Volume of Timber Harvested TMBR-VOL-HVST	CCF	23,297	

<sup>&</sup>lt;sup>4</sup> Please include the costs associated with a contract to complete acres reported, if this level of detail is available, including partner funds

Deufermenne Manaur	I had a firm a second	Tatal Units	Total Transforment
Performance Measure	Unit of measure	Total Units	Total Treatment
		Accomplished	Cost (\$)
			(Contract
			Costs).4
Volume of timber sold TMBR-VOL-SLD	CCF	17,327*	
Green tons from small diameter and low value trees removed			
from NFS lands and made available for bio-energy production	Green tons	420	
BIO-NRG			
Acres of hazardous fuels treated outside the wildland/urban			
interface (WUI) to reduce the risk of catastrophic wildland fire	Acre	5,259	
FP-FUELS-NON-WUI			
Acres of wildland/urban interface (WUI) high priority			
hazardous fuels treated to reduce the risk of catastrophic	Acres	23,419*	
wildland fire FP-FUELS-WUI			
Acres mitigated FP-FUELS-ALL-MIT-NFS	Acres	28,678	
Please also include the acres of prescribed fire accomplished	Acres	22,970	
(Optional) Other performance measure not listed above	Acres		
(Optional) Other performance measure not listed above	Acres		

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

\* Life target established in 2012 proposal has been reached for this accomplishment.

7. **FY 2020 accomplishment narrative** – Summarize key accomplishments and evaluate project progress *not already described elsewhere* in this report. What impact, if any, has Shared Stewardship in your region had on your CFLRP work? (This could be from a Shared Stewardship MOU or the general emphasis in your region on working cross-boundary on shared priorities at the scale needed to have your desired impact). (Please limit answer to two pages).

**Timber management:** On the Ozark-St. Francis National Forests, timber is cut to balance ecosystems and restore watersheds. Historical records show that most of the Ozark-St. Francis National Forests was in oak/pine woodlands and pine/bluestem savannahs. Timber harvest combined with prescribed burning helps to restore and maintain these ecosystems. These treatments also help maintain early successional forest habitats and stimulate understory growth of wildflowers and native grasses that produce habitat for pollinators. Timber was harvested through sale contracts, stewardship contracts, and stewardship agreements. Approximately 17,327 CCF of timber volume was sold in the CFLR project in FY20. The use of MATOC timber marking contracts funded by CFLN was a large contributing factor to this accomplishment. To date, we have reached our CFLR life target for timber volume sold that was in our original 2012 proposal but we will continue to do more harvesting in order to restore ecosystems and achieve desired conditions for the forest.

**Prescribed Burning:** Prescribed burning improves the overall condition of the national forest for species that need a grass and forb understory. We do all of our prescribed burning not just for fuel reduction but also to improve wildlife habitat conditions. Prescribed burning is completed utilizing hand crews and aerial ignition to accomplish burning on a landscape level. Most of our prescribed burns are co-op burns utilizing multiple agencies through shared stewardship which allows us to have enough personnel to successfully burn large acres or multiple burns in one day. Burns are done with a mosaic pattern of different intensities throughout 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. Prescribed burning helps create and maintain woodland conditions across the landscape. These conditions are important in the fire adapted

ecosystems in the Ozark Highlands Region to restore our native flowering plants that are utilized by native pollinators. Prescribed burning also creates and maintains foraging areas for threatened and endangered bat species, such as the Indiana, gray, and northern long-eared bats.

**Non-Native Invasive Species Control:** The problem of increased feral hog populations has become very noticeable in the national forests. Feral hogs 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. Forest Service personnel in cooperation with AGFC and the Animal and Plant Health Inspection Service (APHIS) have a program for trapping and removing feral hogs on National Forest System lands. Blood samples are routinely taken from trapped hogs and sent to APHIS to test for diseases. Game cameras are set up to detect presence and time of feral hogs in areas. It is expected that there are still large populations in the national forest, but this CFLR project helps to control the population. The feral hog problem will continue to exist. However, cooperative projects and new technology will help maintain control of this invasive species. One hog technician was hired in partnership with the AGFC to cover the Wedington Management Unit utilizing our Good Neighbor Authority. Several new traps with more advanced live feed camera systems were used this year. With this enhanced capability we are able to more accurately monitor hogs in the traps, ensuring a higher likelihood of capturing complete sounders.

Non-native invasive plant species treated in FY 20 include kudzu, fescue, privet, sericea lespedeza, thistle, princess tree, and tree of heaven. Treatments had the intended outcome of controlling the known infestations. Most of the work performed to date is on roadsides and fields. However, the seed bank takes years to be depleted and further treatments are needed.

**Soil and Water Improvement, Falling Water Falls Erosion Project:** Falling Water Falls has high visitor use all year long. There were many points of erosion along the roadside where an upwards of 20+ cars would park and visit the popular falls at any given time. The project proposal was to expand the road parallel to the waterfall to allow vehicles to pass safely, create a designated parking area for vehicles to park safely to reduce the erosion into the creek, and stabilize the bank at a highly erodible area while creating a safer entrance to the waterfall in the form of a rock staircase. Also, a pollinator wildflower mix was planted on the slope of the road expansion to help stabilize the bank and establish needed pollinator habitat. This project would not have been possible without the combination of Joint Chiefs' and CFLN funds.

Wildlife Habitat Improvement: AGFC and the NWTF worked to maintain early successional habitat in wildlife openings and fields in the White Rock & Wedington Wildlife Management Areas. The national forest has less than 5 percent of this type of habitat and the Boston Mountain Ranger District has less than 2 percent of this type of critical wildlife habitat. All liming, fertilizing, disking and seeding work was completed either by Forest Service and AGFC personnel or through contracts. The AGFC funded fertilizer, lime, and a portion of the seed. The Forest Service 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 cooperator signs and some gates through the Arkansas State Superfund Program. 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.

**Woodland Restoration:** 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 WSI project

received its first entry treatment and will continue to be carried out utilizing different tools-through stewardship contracts and regular contracts. All trees less than 10 inches dbh will be cut with chainsaws, except preferred wildlife trees, such as: serviceberry, dogwood, and black cherry. The preferred leave trees will be white oak, hickory and red oak. Following mechanical treatments, trees will be left down and the area will be burned in two to three years. Through stewardship contracting, the Wedington Unit will be receiving much needed watershed, forest health, and wildlife habitat improvement treatments in exchange of goods for services. This allows funding to stay within the CFLR project area to accomplish more work on the ground. 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 CFLR area has more open habitat. Before mechanical treatment, the fire regime condition class was III and after treatment it will be moved toward a class II. Following a second entry of prescribed burning, it will be in a class I and maintained in that condition. It is expected that different species of wildlife will increase use of the area (deer, turkey, neotropical migratory birds). It is expected that open woodland conditions will increase wildlife species diversity through time as there is very little of this type of habitat in the area.

**Miles of Trail maintained or reconstructed:** A major contract was awarded in FY 2020 to perform trail work on the Buckhorn and Mill Creek Trail systems on the Boston Mountain Ranger District. These trails are severely degraded with heavy trenching, exposed rocks, and washouts that are causing significant sedimentation to the streams as well as causing a danger to the public utilizing the trails.

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

- If the 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 2020	84,674 acres	
Estimated Cumulative Footprint of Acres (2010 or 2012 through 2020)	200,000 acres	

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

9. Describe any reasons that the FY 2020 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 changes to the previously reported planned accomplishments have taken place.

Acres treated using timber sales is a target we struggle to accomplish due to the length of timber sale contracts, many of these sales that we are selling now may not receive treatment for several years, putting them outside the lifetime of this CFLR project. Prescribed fire acres outside the WUI is another target we struggle with. Most of our prescribed burning occurs within the WUI which is a life target that we have already accomplished and continue to exceed. Some projects

and contracts were affected by Covid restrictions which hindered our ability to obligate all the FY2020 CFLN funds allocated.

#### 10. Planned FY 2021 Accomplishments

Performance Measure Code	Unit of measure	Planned Accomplishment	Planned Accomplishment on non-NFS lands within
		Forest System)	the CFLRP lanascape."
Acres of forest vegetation improved FOR-VEG- IMP	Acres	1,868	Unknown
Acres of forest vegetation established FOR-VEG- EST	Acres	100	Unknown
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	500	Unknown
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles		Unknown
Acres of lake habitat restored or enhanced HBT- ENH-LAK	Acres	100	Unknown
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	10,000	Unknown
Miles of road decommissioned RD-DECOM	Miles		Unknown
Miles of passenger car system roads improved RD-PC-IMP	Miles	100	Unknown
Miles of high clearance system road improved RD-HC-IMP	Miles		Unknown
Volume of timber sold TMBR-VOL-SLD	CCF	10,000	Unknown
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons		Unknown
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON- WUI	Acre	5,000	Unknown
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	15,000	Unknown

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

11. Planned accomplishment narrative and justification <u>if</u> planned FY 2021 accomplishments and/or funding differs from CFLRP project work plan (no more than 1 page):

No change

<sup>&</sup>lt;sup>5</sup> As we shift to more emphasis on sharing results across all lands within the CFLRP projects – if relevant for your project area – please provide estimates for planned work on non-NFS lands within the CFLRP areas for work that generally corresponds with the Agency performance measure to the left and supports the CFLRP landscape strategy. <u>Give your best estimate at this point; if it's unknown how much work will occur off NFS lands, simply state unknown.</u>

12. Please include an up to date list of the members of your collaborative <u>if</u> it has changed from previous years. If the information is available online, you can simply include the hyperlink here.

New members have been invited to attend collaborative meetings and we have discussed the potential for partnering on the project but no official additions have been made at this time.

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

We are currently in the process of working with TNC through a participating agreement to create and produce a series of restoration success videos with topics being: Restoration Overview, Pine Bluestem Restoration, Glade Restoration, and All about the Ozark-Ouachita Highlands Collaborative. We hope to have these videos completed within the next year or two and available for release to showcase this CFLR project.

#### Signatures:

Recommended by (Project Coordinator(s)): Jussien Hauthin

MCREE

Approved by (Forest Supervisor(s)):

Draft reviewed by (collaborative chair or representative):