CFLR Project (Name/Number): Shortleaf – Bluestem Community / 18

National Forest(s): Ouachita National Forest

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	$2,114,355

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	$234,329
CWK2	$652,197
CWKV	$186,596
ER20	$125,447
ER22	$98,002
NFHF	$517,095
NFTM	$206,970
NFVW	$61,840
NFWF	$1,312
TOTAL…	**$2,083,788**

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 Program Funding Guidance, 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
USFWS Oklahoma Fish and Wildlife Conservation Office	**In-kind contribution**	**$2,500**	**Site visits (ex: Buffalo Creek AOP), Interagency Agreement administration, and salary for project ranking.**	**National Forest System Lands**

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
The Nature Conservancy - Arkansas	**In-kind contribution**	**$5,000**	**Meetings, conducting presentations and field trips and tours and assisting with promoting the project (3 people).**	**National Forest System Lands**
Arkansas Game and Fish Commission	**In-kind contribution**	**$2,085**	**NNIS herbicide treatment, field presentations, stewardship meetings, feral hog control, and wild turkey monitoring.**	**National Forest System Lands**
Southern Research Station	**In-kind contribution**	**$5,000**	**Salary of Jim Guldin for revisions to tour handout, field trips and tours.**	**National Forest System Lands**
Arkansas State University	**In-kind contribution**	**$5,824**	**Payroll costs for graduate student Bob Vernocy to work on turkey research data.**	**National Forest System Lands**
Arkansas Department of Agriculture Forestry Division	**In-kind contribution**	**$7,890**	**Prescribed burning conducted on private land in Arkansas under Steven's Act Agreements**	**Other lands within CFLRP landscape: 158 ac: Contiguous burn areas included to reduce soil disturbance by blading or plowing.**

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 revised non-monetary credit limit for contracts awarded in FY20	$0
Revenue generated through Good Neighbor Agreements	**Totals**
NA	$0

Revised non-monetary credit limits 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. Revenue

generated from GNA 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 in-kind services that help the project achieve proposed objectives but do not meet match qualifications. *NOTE: Work on non-National Forest System lands previously reported in this section should now be reported under Partner Match.* Additional leverage might include investments in restoration equipment, research (not monitoring), and planning funds.

Description of item	Where activity/item is located or impacted area	Estimated total amount	Forest Service or Partner Funds?	Source of funds
NEPA Planning – Includes inventories for heritage, biological, roads, and forest stand conditions (CSE); analysis and documentation; GIS support; support services and fuels	**Cold Springs – Poteau Ranger District: Dogwood, Jack Creek, Peanut Mountain, Jack Pigeon, Right Hand Sugar, and Farm Bill 04.** **Choctaw-Kiamichi-Tiak Ranger District: Billy Creek Prescribed Fire DM, Lennox Ridge Prescribed Fire DM, and Big Cedar Vegetation Management.** **Jessieville – Winona - Fourche Ranger District: West Bear Den Prescribed Burn, Vanderslice Prescribed Burn, Iron's Fork Project EA, and Rock Creek Project.**	**$364,744**	**Forest Service**	**NFTM, NFVW, WFHF, NFWF**
NRCS – Arkansas: Western Arkansas – SE Oklahoma Watershed Restoration 2019 – 2021; and Building Resilient Watersheds to Improve Drinking Water Quality in the Ozark and Ouachita Highlands 2020-2022.	**Obligated EQIP practices in Arkansas in counties surrounding main CFLRP block – includes Montgomery, Polk, Scott, Sebastian and Yell Counties.**	**$700,568**	**Partner Funds**	**Joint Chief's Landscape Restoration Partnership grant**

2. Please tell us about the CFLR **project's progress to date in restoring a more fire-adapted ecosystem as described in the project proposal**, and **how it has contributed to the wildland fire goals in the *10-Year Comprehensive Strategy Implementation Plan***.

The project over the past ten years has focused on the ecological benefits of returning the Pine bluestem forest to the Ouachita. Many of the same objectives written in this project coincides with the Comprehensive strategy. Instead of looking at small blocks around the Forest, the CFLR has allowed us to look at landscape strategy that improves thousands of acres of our watershed health. It also aligns with the reduction of hazardous fuels that not only increases herbaceous habitat but also decreases the intensity of any wildfire inside the treatment area for 3-5 years. Instead of suppressing a wildfire in Fuel Model 6 with heavy fuel loading, we can utilize a smaller number of resources and suppress a fire in Fuel Model 1, an open pine-grassland. This conversion to pine-grasslands lowers the effort of suppression and decreases the mortality of desired timber. In addition, most (80%) of the designated CFLR project area is defined as Wildland Urban Interface.

Prescribed Burning Pictures from the 2020 Abbreviated Burn Season on the Shortleaf – Bluestem Community CFLRP Project.

FY2020 Overview

FY20 Activity Description (Agency performance measures)	**Acres**
Number of acres treated by prescribed fire	38,221
Number of acres treated by mechanical thinning	6,767
Number of acres of natural ignitions that are allowed to burn under strategies that result in desired conditions	0
Number of acres treated to restore fire-adapted ecosystems which are maintained in desired condition	38,221
Number of acres mitigated to reduce fire risk	44,988

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?

In order to increase pace and scale over time, the units must first be returned to the natural/desired state. This effort is the majority of the workload. Each unit needs to be treated several (three) times within a 5-year window with prescribed fire to return it to the desired condition. Over the span of the ten-year project, only a couple of areas are still under this description. The rest of the units are now in a maintenance phase on a rotation of prescribed fire every 3-5 years. The maintenance phase takes less time and resources to maintain allowing personnel to continue to focus on other treatments. The key factor in reaching the desired phase has been the number of resources from off-forest that can assist us in our small windows for treatment.

- **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.

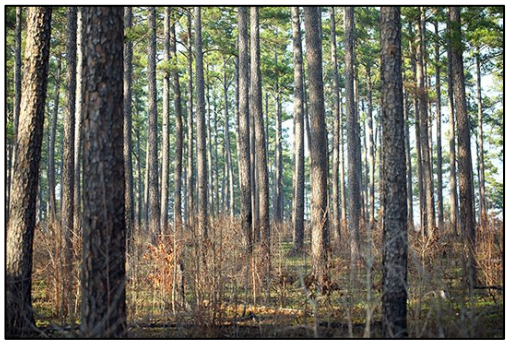
The prioritization of CFLR areas come from leadership and a commitment to the Region/WO to accomplish 100,000 acres annually. You can find in the leadership's performance plan an objective that speaks to this project. When prioritizing aviation assets, we first look at CFLR units that are ready to burn. These units have been our number one priority throughout this project.

- **Please tell us whether these treatments were in "high or very high wildfire hazard area** from the "wildfire hazard potential map" (Wildfire hazard potential)
  - Were the treatments in **proximity to a highly valued resource** like a community, a WUI area, communications site, campground, etc.?

  The Oklahoma Ranger District in South East Oklahoma has the majority of the determined CFLN acres. This district shows moderate to high potential for wildfire hazards identified by the Fire lab. Adjacent to this area, in and around the Forest, there are large residential development. The Forest has identified the potential hazards and has partnered with Oklahoma State Forestry in the Good Neighbor Authority to continue to grow capacity for fuels treatments. Over the past several years, the target fuels on CFLRP project areas has exceeded 25,000 acres. The Hochatown WUI Project decision was signed to further our focus on fuels mitigation in those areas.
- **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.

  2020 has once again proven difficult due to factors outside our control. We were on target and had resources in place (with 50,000 acres prepared to burn), including an exclusive use helicopter that were dedicated to CFLN areas when the RO/WO suspended RX operations due the COVID issues. In addition to this hurdle, the National wildfire season reached critical levels, demanding all fire resources to focus on assisting other states around the country.

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.



From the Buffalo Road, Pine - Bluestem tour on the Poteau/Cold Springs District

Expenditures

Category	**$**
FY2020 Wildfire Preparedness[1]	*
FY2020 Wildfire Suppression[2]	**
The cost of managing fires for resource benefit if appropriate (i.e. full suppression versus managing)	N/A
FY2020 Hazardous Fuels Treatment Costs (CFLN)	327,547
FY2020 Hazardous Fuels Treatment Costs (other BLIs)	***

*****Most of our implementation cost for the project comes from outside resources. In terms of preparedness and suppression it is difficult to measure CFLRP cost, wildfire preparedness and wildfire suppression costs across a landscape or Forest. This Forest's fuel types have a natural fire return interval of 3-5 years. If our CFLRP annual target is 100,000 acres of prescribed burning and in every given year the condition class moves, going from 1-3 in 5 years, it is difficult to calculate the cost difference of CFLRP land and the year treated versus the severity of the fire/cost associated with wildfire.

**Of the 1.8 million acres of NFS land on the Ouachita, approximately 130,000 acres are treated annually by prescribed fire. That is 7% and calculated over our fire return interval of 6 years, 43% of the Forest is treated. This 43% treated is misrepresented due to areas that naturally don't hold fire or may not be attainable. For example, river, lakes, and stream areas would decrease the overall burnable acres while increasing the % burned over a natural interval. Based on the previous statement, assume 70% or 1.2 million acres can burn bringing our % treated over 6 years to 65%. This inevitably has a significant impact to the large fire potential due to hazardous fuels from either human or natural ignition.

*** 63% of total forest acres prescribed burned was funded by CFLRP, the other 37% in and around CFLRN designated areas were treated with NFHF funding. These other acres also contribute to reducing wildfire risk in the designation.

If the funding for CFLRP is diminished, our treated acres will be reduced to half, leaving us to fight the uphill battle the rest of the Forests are facing with large wildfires.

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.

Over the life of the project, we have seen a decrease in overall wildfire on the Forest. This can be contributed to a couple of factors: First, we have had significantly above average rainfall during our typical dry season over the past two years, this has decreased our ten-year average for wildfire. Second, we have increased our acres burned with the CFLR project. 20% of the Forest is covered by the project and our fire return interval has decreased in those areas decreasing the potential for wildfire. It is our assessment that many natural ignitions go unnoticed due to the change in fuel types. The area that could typically hold heat in the heavy fuels during a natural ignition through the moisture that accompanies lightning, is now extinguished by rain in the fine, grassy areas that are now on the forest floor.

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:

[1] 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).

[2] 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.

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

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 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.*
  Partners are engaged in the planning and implementation of prescribed burning through participating agreements for implementation and monitoring. Agreements with TNC, Oklahoma Forestry Services (OFS), Arkansas Forestry Division, National Park Service – Buffalo River, Choctaw Nation, U.S. Fish and Wildlife Service – Wichita Mountains, and the BLM continue to supplement our work force executing prescribed burns. TNC is our major partner in monitoring vegetation in the CFLRP project area. In addition, the Oklahoma Department of Wildlife Conservation (ODWC) is a significant partner carrying out fuels treatment on the McCurtain County Wilderness Area (MCMA) that is surrounded by National Forest System lands within the CFLRP boundaries in Oklahoma. The Choctaw Nation has been under a participating agreement for several years to provide dozer services for completing fire line construction and re-construction. As a leveraged activity, the Forest has agreements with the Cherokee Nation and other tribes for heritage surveys for project areas that include fuel treatments within the CFLRP boundaries.
- *Did treatments include coordinated efforts on other federal, tribal, state, private, etc. lands within or adjacent to the CFLR landscape?*
  In addition to state land burned in Oklahoma under the management of the ODWC, private lands are also burned using agreements authorized under the Community Fire Protection Grant. These agreements allow for the efficient fuels reduction of private lands and, in many cases, reduces ground – disturbing control line blading or plowing. The Oklahoma Fire Master Cooperative agreement allows Federal and State resources to respond during initial attack under a 24-hour mutual aid period on and off Forest.

- *What resource values were you and your partners concerned with protecting or enhancing? Did the treatments help to address these value concerns?*
  A significant portion of the *Shortleaf Bluestem Community* project is within the Habitat Management Area (HMA) for the Endangered (under the Endangered Species Act) red-cockaded woodpecker (RCW). There are two HMA's on the Ouachita, one in Arkansas south of Waldron and one in Oklahoma near Hochatown. Both commercial and non-commercial thinning along with prescribed burning is needed to maintain an open canopy with few woody saplings in the midstory and increased herbaceous species in the understory with woody stems being continually top killed. These treatments, including the accomplishments in 2019, continue to gradually increase the active territories and breeding attempts by the RCW over time.

  Two American Burying Beetle (ABB) Conservation Areas (ABBAs) have been established on the Forest and are included in the Shortleaf Bluestem Community project. There is one ABBA in Arkansas and one in Oklahoma, and the habitat thought to be good for the ABB is like that of the RCW. As with the RCW HMA's, prescribed burning along with thinning, both commercial and non-commercial, is necessary to provide good habitat for the Endangered beetle. Fuels treatments like those mentioned continue to provide the best know habitat conditions for the ABB, although monitoring results are mixed.

  Over the last decade or so, there has been a marked increase in construction of summer rental cabins on private lands intermingled with National Forest Service lands in the vicinity of Hochatown, Oklahoma. The combination of thinning and prescribed burning within this WUI complex has helped to reduce fuels in the vicinity of structures that have been built. The district is planning to implement a decision to intensively reduce fuels in the future, including the treatments mentioned as well as permanent fire breaks, which will also reduce the risk of catastrophic wildfire in the area.

The treatments being implemented in this CFLRP project, including commercial thinning, non-commercial thinning (midstory reduction, pre-commercial thinning, release), has promoted better habitat for bobwhite quail and wild turkey, both demand hunting species that are in decline in Arkansas and southeastern Oklahoma. Well – known "hot spots" for the bobwhite include the RCW HMA near Waldron, Oklahoma, that continues to attract hunters for these species as well as white-tailed deer, providing this rural community with added economic benefits related to this dispersed recreation attraction.

- *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.*
  Yes, the prescribed burning provides the top-killing of woody stems across the burn area and perpetuates the restored pine – bluestem community or provides an incremental improvement in the area as it transitions to a fully restored condition. The other two treatments, commercial thinning and non-commercial thinning, create a short-term challenge for implementing prescribed burning due to the temporary increase in forest floor fuels. In addition, sometimes timber purchasers essentially "lock up" the area in terms of prescribed burning because they wait until the latter part of the contract life to finish the harvesting and burning cannot proceed until the payment units with painted trees are completely harvested.

- *What is your key takeaway from this event – what would you have done differently? What elements will you continue to apply in the future?*
  As stated in other places in this document, the prescribed burning preparation and logistical support needs to change for the Forest to successfully treat this pine – bluestem landscape of about 320,000 acres. We need to recognize when and where burn units are coming within parameters and then react aggressively to provide personnel, equipment (including engines, dozers and helicopters) to get the high priority work on this landscape completed.

- *What <u>didn't</u> work as expected, and why? What was learned?*
  All RX projects that were implemented in 2020 were successful. There were many lessons learned in 2020, many of the lessons revolved around mitigation of COVID and safely implementing field work.
- *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.*
  Currently, the Forest has proposed to FLT a Fuels Program coordinator (GS11) at the SO. Recently, the RO proposed this same concept to the Forest Fire Management as a zone concept. It is our intent to fill this position to help us tell our story regarding wildfire interacting with RX. We know that there are benefits in terms of risk to the firefighter and communities, but we need an employee to focus on collecting those important changes. Historically, this position has been filled to coordinate some of the monitoring data for this project in conjunction with the TNC.

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*
    As a total, the Ouachita National Forest had 36 wildfires that burned 264 acres, or an average of 7.33 acres per wildfire. There was little to no overstory kill from these wildfires, and most did not top-kill the midstory component of the stand.
  - *Brief description of the planned treatment for the area*
    In all cases, the treatment will be the same as an unburned stand: commercial timber sale of thinning, midstory reduction treatment, and then three prescribed burns over the next decade or so. In some cases, wildfires can act to reduce the prescribed burning treatments necessary for full restoration to a pine – bluestem community from three to two, although because of the time needed for commercial thinning contracts and midstory

reduction treatments, this is usually not the case. RX is used to protect the Forests investment in thinning, RCW habitat and to maintain the prescribed habitat, wildfire that takes place can impede those investments during the early stages of the units/areas pine growth. Once a stand meets the desired condition, the investment is naturally protected from wildfire.

- *Summary of next steps – will the project implement treatments elsewhere? Will they complete an assessment?* Any natural ignition that we use for resource benefit will be evaluated by a team composed of a Fire Management Officer, biologist and silviculturist to determine if there were ecological benefits. If there were benefits, those acres would be claimed as accomplishment. Depending on the scope of the fire, those acres could be excluded in the next prescription because of the change to desired condition.
- *Description of collaborative involvement in determining next steps.* Our collaborators are aware of the burn pattern and intensity across the CFLRP project area and the conditions this past year. No specific meetings or discussions are necessary based on the FY 2020 wildfires other than the planned collaboration meetings sponsored by TNC annually.

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.

- Due to the lack of natural ignitions and weather conditions that the Forest faced, we didn't have any natural fires that resulted in resource benefit. All fires were contained by initial attack this year. No BAER assessments were completed. "In fact, it was a Top 5 wettest January through June dating back to 1895, and the wettest such time frame since 1990." NOAA, Little Rock.

3. **What assumptions were used in generating the numbers and/or percentages you plugged into the TREAT tool**? Work from the Enterprise Group was grouped in with contracts since Enterprise employees, while being Forest Service employees, act as contractors by staying for a limited amount of time (about 2-3 weeks) and then leaving and going back to their home duty station.

Logan County was added to the impact area this year, triggered by a new contractor operating out of this area. However, this county contains a portion of the project area (one of the American Burying Beetle Conservation Areas in Arkansas), so it should have been listed from the inception of the project.

One question posed this year was whether "Lighthouse for the Blind" (LHB) should be considered a contract for the purposes of TREAT. Our orders for tracer tree marking paint go to LHB in St. Louis, MO, so this contract would add in to leakage, however we had never included it before in our TREAT inputs because it appeared to be purchase rather than an on-the-ground contract (don't really know the line on these definitions either). Direction was given that these orders could be considered contracts, however we decided not to include them this year based on inconsistency with past year's data inputs.

Lastly, it may be noticed that there are increases in equipment-intensive contracts within the impact zone. These may be attributed to the Forest noticing more and more the amount of road work the Forest completes within the CFLRP boundaries rather than an absolute increase in this type of work. This work is obviously important for access and makes all our "big 3" treatments possible by providing roads that can be used to get to treatment areas.

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	84	116	5,126,817	6,798,808
Forest and watershed restoration component	13	19	164,469	474,970

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	122	292	7,478,799	16,262,984
Implementation and monitoring	26	34	1,671,973	1,967,546
Other Project Activities	0	0	0	0
TOTALS:	**245**	**461**	**14,442,057**	**25,504,307**

4. **Describe other community benefits achieved and the methods used to gather information about these benefits**. **How has CFLR and related activities benefitted your community from a social and/or economic standpoint?** (Please limit answer to two pages).

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
Ease of doing business	As with all small businesses across the nation, the firms involved with contract treatments on the Shortleaf – Bluestem Community project were dealing with Covid-19 precautions themselves and then also having to coordinate their work schedules with Forest Service COR availability, which was also hampered by precautions taken for the virus. Program managers on the districts and at the Forest level worked with these small firms throughout the FY to maximize implementation while making it safe for both contractors and COR's to conduct field work. This was a challenge for both sides, but having local businesses involved made this coordination much easier. The Ouachita has one local business that contracts with us on timber sale preparation, and then local firms are the rule for work including midstory reduction, tree planting, site preparation, precommercial thinning and release activities.	None
Project partnership composition	Although they have always been a close partner with the Ouachita, the Arkansas Department of Agriculture Forestry Division has now become capable of preparing and advertising timber sales on National Forest land. A Good Neighbor Master Agreement was signed a few years ago, and a Supplemental Project Agreement was signed in FY 2020 as the Forestry Division adopted standard operating procedures that meet the intent of Ouachita Forest Plan while also complying with financial rules and regulations for the State of Arkansas. Currently, Ouachita timber staff are working closely with the state to approve a timber sale contract that will be used on the first timber sale the state will advertise on the Forest. This first sale is not within the CFLRP project area, but as the Forestry Division gains knowledge and experience, this GNA work will be implemented on thinning efforts within the Shortleaf – Bluestem Community project.	None.
# Cross-institutional agreements/policies	In FY 2020, the Forest worked with the State of Oklahoma on a Shared Stewardship Memorandum of Understanding. This MOU between the USDA, including the Ouachita National Forest, the Black Kettle unit in	None.

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
	Region 3, and the Oklahoma NRCS, and the State of Oklahoma. This agreement will bring the agencies and organizations closer and obligate them to sharing each other's priorities and working toward those priorities that are important to all. This is where the CFLRP project on the Ouachita may come into play due to a long-time high priority in reducing the risk of the wildland urban interface in and around the Hochatown area. This situation is identified by both the Forest Service and the Oklahoma Forestry Services as critical and becoming more so with every year. The Shortleaf Bluestem Community project area is within this priority area and should benefit from added cross-agency priority setting that this MOU will trigger.	
Relationship building/collaborative work	In 2020, a Shared Stewardship MOU was signed between the two National Forests in Arkansas (Ouachita and Ozark – St. Francis), the Arkansas NRCS, and the State of Arkansas in September 2019. This built momentum and the NRCS and the National Forests worked together to submit a Joint Chiefs' Landscape Restoration Partnership project proposal named ***Building Resilient Watersheds to Improve Drinking Water Quality in the Ozark and Ouachita Highlands 2020-2022.*** This project was eventually selected for funding in 2020 as Project 82. The NRCS received $2 million and the two National Forests in Arkansas split $385,000 in allocations, resulting in the implementation of numerous EQIP practices (NRCS) along with CFLRP – type treatments (midstory reduction, prescribed burning, timber sale preparation) on the Ouachita in addition to soil and water projects across the project watersheds. Work on the Shared Stewardship MOU coupled with the successful award of the JCLRP funding has brought the Forest Service and the NRCS closer together as partners and built strong communication ties between the organizations.	None.

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

Over the nine years of the ***Shortleaf – Bluestem Community*** Project, monitoring has been important to carry out and make use of in providing unbiased results of our work on the landscape. Our proposal speaks to this effort on pages 12-15.

In the first 3-4 years of the project, we felt it was important to "plug the gaps" of monitoring and research that already had been completed (over 50 scientific publications were already done on treatments), and this led to funding wild turkey research conducted by Arkansas State University and in cooperation with the National Wild Turkey Federation and the Arkansas Game and Fish Commission. Unfortunately, due to several factors, this effort has not formally been completed, so this "gap" remains.

Economic monitoring has also been completed by the University of Arkansas at Monticello, essentially conducting a much more specific analysis of the economic impacts on the local area using the model IMPLAN.

Another study that was done was on soft mast produced in treatment areas that receive maintenance burning every three years, examining if this rotational burning has an adverse impact on soft mast production. This study was completed by the Southern Research Station in partnership with Stephen F. Austin University. The study concluded that it doesn't have a substantial negative impact and works to improve periodic production of soft mast across the landscape.

As detailed in the 2019 Ecological Indicator Progress Report, estimates of active territories of the Red-Cockaded Woodpecker were thought to have been a holistic way to monitor our progress on creating high-quality pine-bluestem conditions, however the monitoring itself has fallen of significantly and so it remains a question as to whether this biological metric is appropriate or even accurate for the conditions that we attempting to meet.

Finally, we have the vegetation plot remeasurements that The Nature Conservancy conducts and analyzes in cooperation with district personnel in Arkansas and Oklahoma. This ongoing work is detailed below with periodic releases of the analyses. The Nature Conservancy has also presented this information multiple times at various meetings to keep the Forest Service and collaborators informed about the results.

Specific updates on monitoring is also given below:

Red-Cockaded Woodpecker Monitoring – Arkansas

The Ouachita National Forest RCW population is best described as having remained stable for the last four breeding seasons (see attached 1990-2020 breeding records table). Our primary means of assessing RCW population trends is a 100% survey of all our occupied territories during the nesting season to determine presence/absence of nesting activity. While there has been little growth in the number of potential breeding groups (PBGs) during this time period, there is still cause for optimism based on anecdotal evidence of progressively higher numbers of active cavities per active territory. This indicator of larger group sizes should eventually translate into increases in the number of PBGs. To facilitate this potential for population growth the district continues to emphasize all aspects of habitat management including prescribed burning, brush-hogging cavity tree clusters (ctcs), midstory removal in nesting and foraging habitat, and maintenance of serviceable cavities in both active ctcs and recruitment clusters. To maintain enough serviceable cavities in these clusters a full range of techniques are applied- including cavity restrictor and snake excluder device installations, as well as wasp and southern flying squirrel removals, and general cavity cleanout and repair activities. The district will also attempt to take advantage of augmentation opportunities in those active territories where a viable PBG may not reside. For example: in an active territory with a confirmed bachelor male, a juvenile female could be introduced from a designated donor population to augment that unpaired male. Such augmentations were planned this past year based upon the presence of several non-nesting active territories. However, the occurrence of major hurricanes, which impacted our potential donor populations, precluded our ability to complete any such moves. Those issues which contribute to slow ONF population growth include an inherently low species recruitment rate, and widely spaced territories spread over an immense landscape of high-quality habitat, which makes natural dispersal and new group formations biologically more difficult.

Multi-Party Vegetation Monitoring – The Nature Conservancy

The Nature Conservancy (TNC) and the Ouachita National Forest conduct vegetation monitoring in the CFLRP area. Field work is conducted jointly. Data analysis and reporting is conducted by TNC.

Vegetation monitoring collects data on forest structure and composition (overstory, midstory, shrub layer, and ground layer). Data are analyzed to extrapolate landscape condition, track changes in vegetation in relation to management actions, and compare current conditions with the desired ecological condition. TNC and the Ouachita National Forest hold annual meetings with the CFLRP partners, which are hosted by the Fire Learning Network. During these meetings, the latest findings of the vegetation monitoring are discussed with the partnership.

Major findings include:

1. Following the ecological prescriptions, thinning to increase light to the ground in combination with prescribed burning, moves the pine bluestem ecosystem towards desired ecological condition.

2. Implementing only a portion of the prescription, either ecological thinning or prescribed burning alone, does not significantly improve forest condition; at least in the time frame of the project so far. Completing only a portion of the prescription, or delaying components of it, results in some improvements compared to baseline, but progress soon stagnates.

3. The implementation of prescribed burns has fallen behind the ability to complete thinning treatments.

4. Recommendations include expanding the prescribed burning implementation window to year-round, with greater emphasis placed outside the traditional February – March window.

Field work for the third round of monitoring (baseline, 1st repeat, and 2nd repeat) is being analyzed this winter. The report will be available in the spring of 2021.

The vegetation monitoring is robust and has given the collaborative the information and analyses it has needed to assess the efficacy of the ecological prescriptions. It seems likely that five-year intervals will be sufficient for monitoring vegetation condition going forward.

Also, below is a link to a shared folder containing the monitoring reports we have produced thus far.

https://tnc.box.com/s/d8ztxm6lebidmlaogyol3jyup674kchg

5. FY 2020 Agency performance measure accomplishments:

6. Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost ($) *(Contract Costs)*[3]
Acres of forest vegetation established FOR-VEG-EST	Acres	530	CFLN $29,028 CFKV $23,324
Acres of forest vegetation improved FOR-VEG-IMP	Acres	578	CFLN $82,374 CFKV $163,272
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	1	CFWF $143
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	0	0

[3] Please include the costs associated with a contract to complete acres reported, if this level of detail is available, including partner funds

6. Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost ($) *(Contract Costs)*[3]
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	2,177	$3,388
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	0	0
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	0	0
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	100,714	CFLN $746,624 CFKV $143,336
Acres of rangeland vegetation improved RG-VEG-IMP	Acres	1,058	CFVW $25,392 NFRG $25,392
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	1	(see below)
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	439	CFRD $243,519[1] CMRD $333,556[2] ER20 $125,146 ER22 $71,069
Miles of road decommissioned RD-DECOM	Miles	0	0
Miles of passenger car system roads improved RD-PC-IMP	Miles	0	0
Miles of high clearance system road improved RD-HC-IMP	Miles	0	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	N/A
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	0	0
Miles of system trail maintained to standard TL-MAINT-STD	Miles	0	0
Miles of system trail improved to standard TL-IMP-STD	Miles	0	0
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles	0	0
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	657	No contracts involved
Volume of Timber Harvested TMBR-VOL-HVST	CCF	50,660	No contracts involved
Volume of timber sold TMBR-VOL-SLD	CCF	93,503	CFLN $265,061 CFK2 $19,014
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	7,577	(See TMBR-VOL-SLD)
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	8,249	CFLN $94,746
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	33,046	CFLN $378,982
Acres mitigated FP-FUELS-ALL-MIT-NFS	Acres	44,988	(costs contained in multiple line items[3])
Please also include the acres of prescribed fire accomplished	Acres	38,221	(costs contained in multiple line items[4])

6. Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost ($) *(Contract Costs)*[3]
RD-PC-RCNSTR	*Acres*	16	(Included with RD-PC-MAINT)
(Optional) Other performance measure not listed above	*Acres*		

[1]Exceeds gPAS total given in question 1 (page 1) because only contract costs were included in this BLI. Contract preparation and administration costs are included in this value.

[2]Funding in CMRD was allocated to the Forest in the final week of the FY. This amount of CMRD was spent on road maintenance (gravel application) within the CFLRP boundaries, including contract preparation and administration. This funding was not included in the CFRD job code due to the rapid contracting process and uncertain locations at the time.

[3]Costs contained in FP-FUELS-NON-WUI, FP-FUELS-WUI, FOR-VEG-IMP, and HBT-ENH-TERR.

[4]Costs contained in the FP-FUELS-NON-WUI and FP-FUELS-WUI.

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).

   The table below displays the accomplishments of the three main treatments to achieve a restored shortleaf pine – bluestem grass condition in forest communities:

FY	Volume Awarded (ccf)	Harvest Accomplished[1] (ac)	Harvest Completed[2] (ac)	Non-Commercial Thinning – WSI, TSI (ac)	Prescribed Burning (ac)
2012	69,206	5,066	160	3,660	44,805
2013	71,700	4,673	2,465	7,021	54,461
2014	79,828	8,801	4,195	5,416	43,532
2015	55,237	4,456	3,137	4,947	25,678
2016	59,153	5,870	3,521	1,707	71,033
2017	64,117	5,294	3,182	2,715	52,290
2018	27,401	2,458	6,429	1,324	58,603
2019	36,559	2,941	2,225	1,338	27,865
2020	21,119	3,166	657	5,855	38,221
Total	484,320	42,725	25,971	33,983	416,488
10-year Target	415,000	58,000	58,000	48,000	955,000
% of 10-year Target	**117%**	**74%**	**45%**	**71%**	**44%**

[1]Estimated by using the Cut and Sold Report and converting volume to acres.
[2]From FACTS through October 31, 2020. Generally, these are total payment unit acres cut out and "accepted" by the Forest Service.

Completion of the Buffalo Creek Bridge (non-CFLRP funding)

The Buffalo Creek Bridge, a crossing that has long been a problem for administrative and contractual access, was completed recently. This bridge was completed using non-CFLRP funding but is significant in that it allows better access into a substantial acreage of the CFLRP acreage on the Broken Bow unit of the Choctaw – Kiamichi – Tiak Ranger District in Oklahoma. Completion of this bridge along with the Big Hudson crossing (completed in 2018) should make management actions, including timber sales, midstory reduction contracts, prescribed burning and wildfire suppression easier and more efficient in the future.

Brown-Headed Nuthatch Translocation

Brown-Headed Nuthatch After Capture in Mist Net in 2020; Soon to be Airlifted to Missouri.

Nearly two years ago a multi-agency and NGO cooperative project was begun to reestablish a population of Brown-headed nuthatches (BHNU) in and around the Mark Twain NF in Missouri. Groundbreaking species habitat utilization research work by Richard Stanton on the ONF in 2013, set the stage for the pine/bluestem ecosystem renewal efforts in Arkansas' Ouachita NF to serve as a source population for this BHNU restoration project. This coordinated effort involved the Missouri Department of Conservation (MDC) as the lead agency with other partners being the Ouachita NF, the Ozark and Mark Twain NFs, Arkansas Game & Fish Commission, USDA FS Northern Research Station, University of Missouri, Central Hardwoods Joint Venture, USDI Fish and Wildlife Service, and Tall Timbers Research Station. Following months of planning, a two-stage translocation plan was implemented. This plan involved preparing release sites with artificial roost/nest cavity boxes and then moving 100 individual BHNUs to Missouri in two aggregates of 50 birds each in 2010 and 2021. The first translocations began the last week of August 2020. A total of 6 trapping sessions during the following 5 weeks yielded a total of 46 BHNUs. Because of the potential for long periods of captivity, which would have been required to transport these birds overland from capture to release sites, an MDC fixed wing aircraft was utilized to expedite these physical moves. This required 6 round trip flights, each with a corresponding overland trip to the final release sites to complete the transport of each days catch. The logistics of manning multiple trap and release crews at widely separated sites, only on days with weather which allowed small aircraft flights, complicated planned activities for any given day. All 46 birds had to be banded and most of them were also fitted with radio transmitters to allow a short period of radio tracking following release. The resulting radio telemetry data confirmed both a very high initial survival rate of the released birds, and that they usually remained very near the release sites, often in multiple-bird associations. Post-release monitoring of these nuthatches will continue through next nesting season. In August 2021 the remaining cohort of 54 of 100 BHNUs will be translocated from the ONF to Missouri with hopes of further augmenting that reestablished population.

Jason Garrett, Biologist on the Poteau – Cold Springs RD, places a translocated RCW into a prepared cavity on the Oklahoma RD in October, 2019.

Red-Cockaded Woodpecker Translocation to Oklahoma

On October 9, 2019, five pairs of RCWs were translocated to the Oklahoma Ranger District and the McCurtain County Wilderness Area. Two pairs were translocated on the OKRD and three pairs on the MCWA. No immediate activity was evident in the two OKRD recruitment stands where birds were released. In late January 2020, an RCW was seen exiting one of the cavities in one of the OKRD recruitment stands. Monitoring of this site continued through 2020 with minimal direct evidence of birds. It wasn't until September 2020 that two cavities were confirmed active through visual confirmation of RCWs. Monitoring will occur in January 2021 to determine if these are indeed birds from the October 2019 translocation.

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 CFLRP reporting templates and guidance 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	1,457 acres
Estimated Cumulative Footprint of Acres (2010 or 2012 through 2020)	240,443 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?

In FY 2020, the Ouachita calculated the footprint using local databases of record. Acres which overlapped treatments from previous years were subtracted from the total. The results showed that the footprint area treated for FY 20 was 1,457 acres.

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).

Our three main treatments, timber sales for commercial thinning, mid-story reduction treatments for non-commercial thinning of overstocked stems, and then prescribed burning, were all significantly affected by the Covid-19 precautions that the Forest, Region and whole agency took to keep employees safe.

The unfortunate timing of the epidemic meant our prescribed burning program for the Shortleaf – Bluestem Community Project was cut off during the peak burning period of the year, February-March. At that time, the Fire Management Officer had several off-Forest detail crews combined with four helicopters working here on the Forest and all of them had to stand-down and then eventually were demobilized and sent back to their home units. The helicopters were already largely paid for under existing contracts but were not used to any great extent after that point in time. Despite this huge set-back, the project logged upwards of 40,000 acres of high-quality prescribed burning and was able to obtain

some accomplishments later into the summer with smaller growing season burns after the Covid-19 cases went down in the area.

Field work to prepare midstory reduction contracts were also curtailed during the early spring due to Covid-19 precautions, but field crews were re-activated later in the spring and the project accomplished substantial acres of treatment, and made use of mulching with some of the treatments that gives the district 3-4 years before needing to conduct a prescribed burn.

Lastly, field work on timber sales was stopped for about two months, putting the timber sale preparation program for the Forest and the project into slow motion. Due in part to the shelf volume the Forest had built, there was no significant impact on the outcome, and the Forest, both within the CFLRP boundaries and on the whole, was successful in preparing, advertising, and awarding a substantial volume of timber sales in 2020.

Overall, 2020 saw continued struggles with implementation of prescribed burning at a level to restore and maintain the large 350,000-acre landscape of pine-bluestem grass condition. Continued bottlenecks in this treatment have led to the following changes in management:

1. Gradually increased use of mulching (mastication) for midstory reduction treatments. This treatment, as described above, gives the site 3-4 years of time before needing a prescribed burn, and if this can be done over increasing numbers of acres can marginally reduce the demand for prescribed burning in any one year. Mastication costs are much higher than conventional chainsaw treatments currently used for midstory reduction, but the hope is that a "rough mulch" treatment currently not available in our contract with venders may offer substantially reduced prices per acre.
2. Use of herbicides is also slowly increasing over time, and much like mulching, can reduce the dependence on prescribed burning by extending the time between treatments. Like mulching, this treatment comes at a high price and can be controversial, especially if used in widespread treatments.
3. In 2020, the Forest purchased a medium-sized masticating machine (non-CFLRP funds) and will be scheduled for heavy use in 2021. As described above, the hope is that districts can treat areas with the masticator and thereby reduce the demand for prescribed burning.

9b. **(OPTIONAL) FOR INTERNAL USE:** The following responses are directed towards feedback on *internal* bottlenecks or issues that may impact your project. Please use this space to raise awareness on key internal issues, or opportunities to improve processes moving forward. Responses will be included in an internal document. What are the limiting factors to success or more success of the CFLR? How can the National Forest and its collaborators operate in a more integrated and synergized way?

One of the most important treatments for our project is prescribed burning. This tool is highly desirable for use in moving forest communities into an advanced stage of restored pine – bluestem species/structure and then is essential for maintaining a restored condition across a large landscape (our example is 350,000 acres) with reasonable financial resources. Options without this tool include increased use of mulching (mastication) treatments and/or widespread use of selective herbicide treatments. Both tools increase the costs substantially, although the Ouachita National Forest is increasing our investment in these tools. In 2020, the Forest purchased a medium-sized masticator and increased the use of contracted herbicide treatments. However, neither one of the treatments, or even the combined levels of treatments with these tools cannot completely replace prescribed burning and the beneficial effects it has on the ecosystem.

Each year, the Ouachita attempts to get to a balanced three-year rotation by providing substantial resources to burn bosses in the form of helicopter availability, supplies, and personnel. Personnel are provided by paying for off-Forest detailers with In-Service Agreements (ISA's). Budget modernization has complicated this for the project by reducing the incentive (funding) for permanent employees and making the process for funding others more complicated. Use of national accounts of NFSE and WFSE for the year-around funding of employees has obvious efficiencies and conforms to accounting norms that the Forest Service continually seeks to obtain. However, this budgeting change also comes with unintended consequences also.

The following is provided to you to highlight the most significant new bottleneck we face in restoring pine – bluestem forest communities and is meant to raise awareness of this issue following changes due to budget modernization in the upcoming FY 2021.

10. Planned FY 2021 Accomplishments (assumes full direct funding of $2.4 million)

Performance Measure Code	**Unit of measure**	**Planned Accomplishment for 2021** (National Forest System)	***Planned Accomplishment on non-NFS lands within the CFLRP landscape[4]***
Acres of forest vegetation established FOR-VEG-EST	Acres	320	900, anticipated within two JCLRP with EQIP funding
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	34	Unknown
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	1	Unknown
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	99,000	Unknown
Miles of road decommissioned RD-DECOM	Miles	2	0
Miles of passenger car system roads improved RD-PC-IMP	Miles	3	Unknown
Miles of high clearance system road improved RD-HC-IMP	Miles	18	Unknown
Volume of timber sold TMBR-VOL-SLD	CCF	41,500	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	5,000	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	35,000	3,000 estimated from coop burning of the McCurtain Co. Wilderness, EQIP practices and Stevens Act Agreements
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	65,000	3,000, (same as above)

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 changes from CFLRP project proposal.

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. ***There has been no change in our list of collaborative members over FY 2020.***

[4] 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>

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.

Warren Montague, District Wildlife Biologist on the Poteau – Cold Springs Ranger District, leads a shortleaf pine bluestem grass restoration tour for a group of sixteen scientists from Germany in 2020.

Signatures:

Recommended by (Project Coordinator(s)): _____

Approved by (Forest Supervisor(s)): _____

Draft reviewed by (collaborative chair or representative): _____
The Nature Conservancy