

CFLR Project (Name/Number): Zuni Mountains / CFLR012
National Forest(s): Cibola National Forest and National Grasslands

Please review the “CFLR Annual Report Instructions” document before filling out the template below. Responses to the prompts in this annual report should be typed directly into the template. Example information is included in red. Please delete red text before submitting. Please submit documents as Word files for ease of review and to ensure accessibility compliance for posting on the website.

Reports are due to the Washington Office (via the Regional Forester to Deputy Chief for National Forest System Christopher B. French, cc’ing Lindsay Buchanan and Jessica Robertson) no later than December 18, 2020 for review. Coordinate with your Regional CFLRP Coordinator to confirm the deadline for Regional Office review. Please reach out to lindsay.buchanan@usda.gov with any questions. Thank you!

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	\$795,005.31

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
CFHF	\$21,725.86
CFRG	\$157,731.06
CFTM	\$116,326.60
CFVW	\$173,206.60
CFWF	\$1,468.83
NFTM*	\$50,000*

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.

*End of year funding provided from the Region 3 office modified into the agreement.

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
Mount Taylor Manufacturing	<input type="checkbox"/> In-kind contribution <input checked="" type="checkbox"/> Funding Budget Line Item, if relevant: ¹	\$120,000	CFRP Utilization Grant for equipment at its processing site	<input checked="" type="checkbox"/> National Forest System Lands <input type="checkbox"/> Other lands within CFLRP landscape:

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
Forest Health Initiative (NMSF FG)	<input checked="" type="checkbox"/> In-kind contribution <input type="checkbox"/> Funding Budget Line Item, if relevant: ¹	Weber - 6,976.4 Wallen - 5,025.5 Schali - 11,946.81 Zillhart - 12952.94	In total, 4 landowners invested 36,901.65 in forest health treatments in the landscape through the Forest Health Initiative.	<input type="checkbox"/> National Forest System Lands <input checked="" type="checkbox"/> Other lands within CFLRP landscape:
NMSF*	<input checked="" type="checkbox"/> In-kind contribution <input type="checkbox"/> Funding Budget Line Item, if relevant: ¹	\$631,808	640.5 acres	<input type="checkbox"/> National Forest System Lands <input checked="" type="checkbox"/> Other lands within CFLRP landscape:
Forest Stewards Youth Corps – Mt. Taylor Summer Crew	<input checked="" type="checkbox"/> In-kind contribution <input type="checkbox"/> Funding Budget Line Item, if relevant: ¹	\$35,000	9 weeks of conservation projects (fire line, tree marking, trails, recreation, etc.) in the landscape	<input checked="" type="checkbox"/> National Forest System Lands <input type="checkbox"/> 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.

*Dollars and acres from NMSF (11/24/2020)

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	\$781,300
Revenue generated through Good Neighbor Agreements	Totals
	\$

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.

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.**

FY2020 Overview

FY20 Activity Description (Agency performance measures)	Acres
Number of acres treated by prescribed fire	0
Number of acres treated by mechanical thinning	0
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	0
Number of acres mitigated to reduce fire risk	0

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?

On September 12, 2019 there was a Court Order stating that USFS timber management actions, including prescribed fire, on the five national forests in New Mexico and the Tonto National Forest in Arizona must cease pending formal consultation with US Fish and Wildlife Service for the Mexican spotted owl. Because of the Mexican spotted owl injunction and a backlog of 5-year surveys in approved burned areas, no prescribed burning was able to take place in FY20. Because of large scale needs and lack of personnel, owl surveys have historically been performed by Enterprise TEAMS. Because of the COVID-19 pandemic, TEAMS crews were unable to travel to Cibola or McKinley Counties, which were two of the hardest hit counties in NM during the survey window.

Forest personnel were able to complete approximately 2,200 acres of 5-year surveys in the Bluewater portion of the CFLRP. These surveys not only assessed potential habitat, but resurveyed known suitable habitat for the presence of Mexican spotted owls. A second round of surveys will be conducted in 2021 to clear remaining acres in Bluewater for thinning and prescribed burning.

The Zuni Mountain National Wild Turkey Federation Stewardship Agreement was issued a notice to proceed after the injunction was resolved in late October. Available Restoration Blocks (funded with up to date surveys) include:

Bluewater:

- ✓ Peavine (61 acres)
- ✓ Northwest (827 acres)

Puerco:

- ✓ McGaffey (1,734 acres)
- ✓ McQue (781 acres)
- ✓ Perea (1,231 acres)
- ✓ Continental Divide (215 acres)
- ✓ Zuni Mountain (300 acres)

- **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.

In general, prescribed burning is performed within 3-5 years after commercial treatment, which is the primary way in which the Bluewater project has been prioritized. Prescribed burning, like the mechanical treatments, are progressing from east to west across the CFLRP footprint. In recent years, the district has ramped up prescribed burning using aerial ignitions to cover larger areas while still achieving desired fire effects. Acres treated by prescribed fire went from hundreds of acres burned to thousands of acres burned starting in 2018 and this level of treatment is expected resume in FY21.

- **Please tell us whether these treatments were in “high or very high wildfire hazard area** from the “wildfire hazard potential map” (<https://www.firelab.org/project/wildfire-hazard-potential>)
 - Were the treatments in **proximity to a highly valued resource** like a community, a WUI area, communications site, campground, etc.?

All scheduled treatments within the Zuni Mountain CFLRP occur within moderate wildfire hazard areas, according to the map linked above. All treatments occur within WUI, many adjacent to private inholdings within the Forest.

- **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.

As treatments have progressed to the east, farther away from the mill, and transportation costs have increased we modified the agreement to account for the additional costs in 2019. The increased cost per acre for mechanical treatments modified in the NWTF agreement was not expected until treatments in Bluewater were completed. However, with the impacts of the MSO Injunction, these increased costs have been a welcome addition to Mt Taylor Manufacturing as implementation finally resumed in December on NFS lands after a 14 month suspension.

In terms of prescribed fire, the use of aerial ignitions has reduced overall costs through the ability to treat significantly larger areas in less time. This has dramatically reduced the backlog and the exposure time for fire fighters actively involved in ignition operations.

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.

Expenditures

Category	\$
FY2020 Wildfire Preparedness ¹	100,000
FY2020 Wildfire Suppression ²	25,000

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).

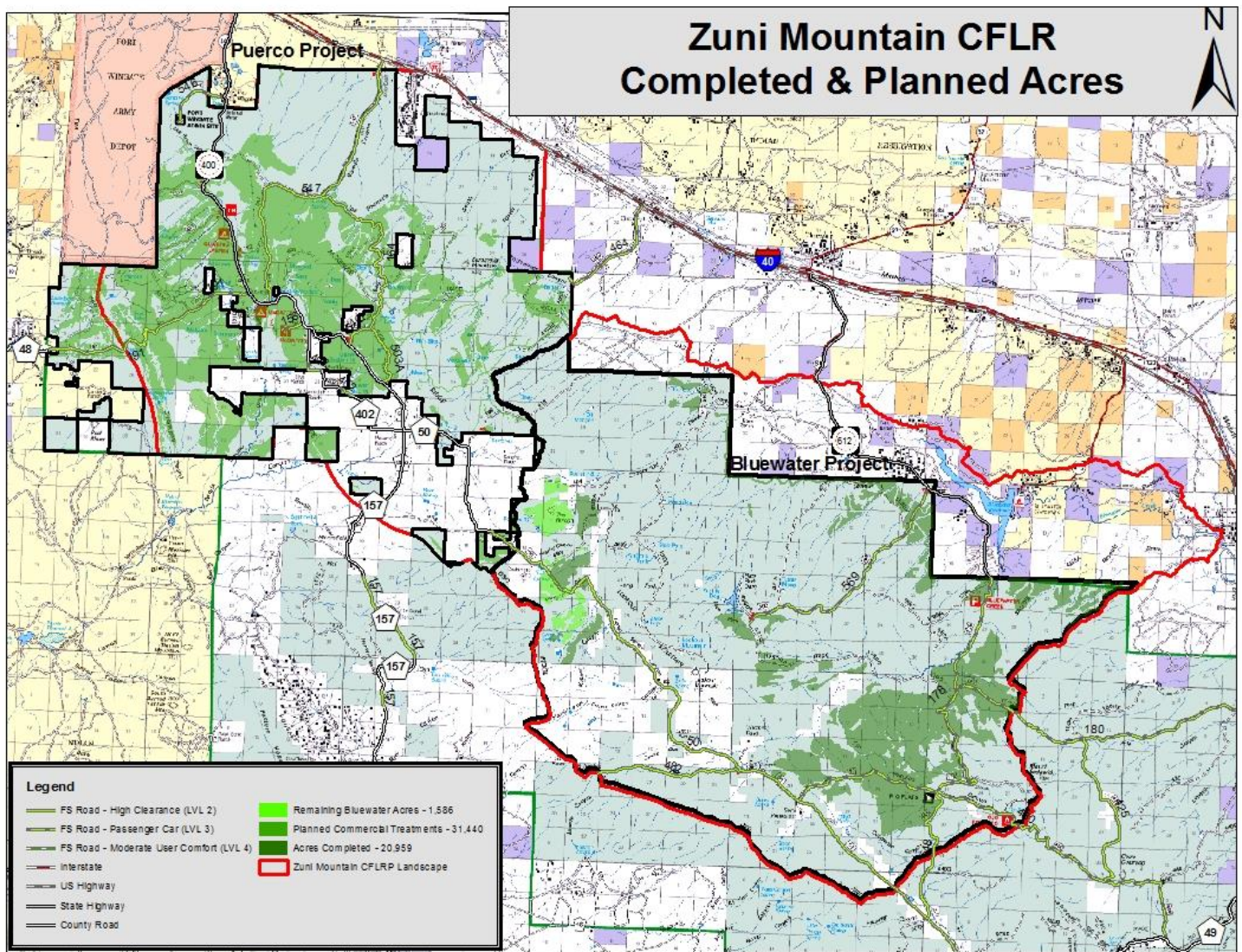
² Include emergency fire suppression and BAER within the project landscape. Describe acres of fires contained and not contained by initial attack. Describe acres of resource benefits achieved by unplanned ignitions within the landscape. Where existing fuel treatments within the landscape are tested by wildfire, summary and reference the fuel treatment effectiveness report.

The cost of managing fires for resource benefit if appropriate (i.e. full suppression versus managing)	n/a
FY2020 Hazardous Fuels Treatment Costs (CFLN)	0
FY2020 Hazardous Fuels Treatment Costs (other BLIs)	0

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.

Unfortunately, no hazardous fuel reduction treatments were completed in FY20 due to the MSO injunction that was in place through the entire fiscal year. All of the mechanical restoration treatments in ponderosa pine reduce canopy cover and alter the arrangement of trees to a more historical clumpy-groupy arrangement that reduces crown fire potential and supports low-intensity surface fire. When a fire does occur within a treated area, it is much easier to contain and control. Although most of these treatments have not been truly “tested” yet within the CFLRP, there was a wildfire in 2018 that burned through a non-commercial treatment funded by NM State Forestry (Salitre Mesa). The fire burned through the majority of the 500 acre treatment area without severe fire effects. The photo below shows how the fire reduced activity fuels and raised the canopy base height without major torching or crowning.





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:

By comparing pre- and post-treatment stand examination data, we have documented that restoration treatments have been effective in reducing crown fire hazard, which correlates with reduced suppression costs and subsequent rehabilitation and reforestation needs. Post treatment trees per acre are within resilience envelope for bark beetle outbreak, crown fire, and drought. Average tree diameter increased across the landscape, signaling the protection of large and old trees in the CFLR. The following link will take you to analysis of pre- and post-treatment data.
<https://static1.squarespace.com/static/57a36192f5e231c1eb0805f4/t/5e614f3965f6e80c57a7a0f2/1583435581090/MonitoringUpdateFinal.pdf>

Where thinning has taken place, treatments reduced the number of trees per acre (TPA) while increasing the average size of the trees on the landscape (QMD). These two metrics also correlated with a reduction in the canopy bulk density (CBD). Taken as a whole, these changes to stand structure are associated with a reduction in the hazard of crown fire. With fewer small trees, larger trees protected, and with less continuous canopy on the landscape, the risk of uncharacteristic crown fire is substantially decreased. The photo below shows how post-treatment density, stand structure and arrangement have reduced crown fire hazard.



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 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 didn't 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 planned for treatment but not yet treated:

- Please include:
 - o Acres impacted and severity of impact
 - o Brief description of the planned treatment for the area
 - o Summary of next steps – will the project implement treatments elsewhere? Will they complete an assessment?
 - o 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 [here](#).

The Cibola National Forest, the Forest Stewards Guild, and project partners continued to collect socioeconomic data for TREAT as well as for the additional socioeconomic monitoring that occurs every project year. In gathering the numbers and percentages for use in TREAT, the Guild contacted all available relevant entities and asked for direct and specific information. Due to the Mexican Spotted Owl injunction, treatments proposed on federal land were not implemented and treatments on State and private land were essential to maintaining employment and financial stability of local mills. To capture the social and economic effects of treatments on private land, we interviewed additional project partners. The data gathering and associated interviews were consistent with previous year’s methods. Data collected in interviews was shared with Forest Service Economists as “local economic data” as per TREAT instructions.

Treatments completed on private lands within the Zuni Mountain CFLR boundary were funded through the Forest and Watershed Restoration Act, administered by New Mexico State Forestry. In fiscal year 2020, 262.1 certified acres were completed on private land and over 500 acres have been completed on-the-ground. Wood supplied through these treatments on private land will stabilize approximately 16 jobs at the Keller Lumber Company and 27 jobs at Mount Taylor Millworks.

FY 2020 Jobs Supported/Maintained (CFLN and matching funding):

Copy/paste totals from the **All Funds tab** of the TREAT spreadsheet provided to each project from EMC Economist:

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	9	11	431,152	613,539
Forest and watershed restoration component	39	50	343,868	691,115
Mill processing component	6	12	205,453	431,104
Implementation and monitoring	17	19	492,695	553,572
Other Project Activities	0	0	6,488	8,572
TOTALS:	73	93	1,479,657	2,297,902

According to 2019 employment numbers for Cibola County, (Bureau of Labor Statistics, Dec 2019) there were 7,647 people employed and the CFLR employs about 1.2% of them. This is equivalent to 4,000 people in Bernalillo County, so even though the numbers seem small these jobs have a huge impact in the local area.

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).

Prior year treatments in Bluewater helped leverage a landowner agreement and purchase order with New Mexico Forestry Division signed that enabled work to start on several private ranches in the Zuni Mountains. The funding source is through the state Forest and Watershed Restoration Act (FAWRA) that Governor Michelle Lujan Grisham signed into law in March 2019. The Forestry Division has identified up to 4,500 acres of private land in the vicinity, which will supplement the wood supply when it is unavailable on the National Forest and provide a long-term reliable wood supply.

In addition to TREAT, the Forest Stewards Guild also track jobs directly through surveys and interviews with contractors and others employing people to get restoration work done in the landscape. Full time equivalent (FTE) does not always tell the whole story regarding jobs and economic impact. With a single FTE multiple people may have benefited from the wages and training that one FTE represents. The Forest Stewards Youth Corps (FSYC) is a good example of this. While the program only accounted for .7 FTE due to its seasonal nature, four young people were employed and gained skills and experience working in the Zuni Mountains CLFR landscape that will help them find employment in the future.

When you compare the total FTE accounted for in surveys and interviews in the table below, there were almost twice as many people as there are indicated by the FTE. It is also encouraging that the ratio of FTE to individuals employed is the highest for the mill processing and harvesting & trucking sectors. This indicates that those jobs are closer to full time as opposed to seasonal, which provides more stable employment and better economic conditions for local workers. Furthermore, "individuals employed" does not take into account staff turnover meaning that if the ratio were calculated using FTE to positions the ratio would likely be higher and further indicate more stable employment in those sectors.

FY 2020 Jobs and Wages				
Employment Sector	Full-Time Equivalent	Wages	Number of People Employed	Ratio of Jobs to FTE
Harvesting and Trucking	5.8	\$231,261.00	28	0.21
Youth	0.7	\$14,760.00	4	0.17
Mill Processing	27.0	\$803,349.00	29	0.93
Monitoring	0.5	\$33,585.00	6	0.08
Total	34.0	\$1,082,955.00	67	0.51

The Zuni Mountains CFLR relies on and contributes to a network of support of many different agencies and colleagues. Project collaborators contributed to proposal development, environmental and cultural clearances, treatment implementation, educational outreach, wood utilization, and monitoring. Some of the collaborators included: New

Mexico State Forestry, Mount Taylor Millworks and Manufacturing, Forest Fitness, Keller Lumber Company, The Forest Stewards Guild, Mt. Taylor Ranger District of the USFS, New Mexico State Land Office, Forest Stewards Youth Conservation Corps, The Native Plant Society, Great Old Broads for Wilderness, Cottonwood Gulch, Ramah Navajo, Pueblo of Acoma, Pueblo of Laguna, Zuni Pueblo, and many others.

The network of partnerships and collaboration developed through the Zuni Mountains CFLRP builds the adaptive capacity of communities surrounding the project landscape. Increased communication and cooperation amongst local agency representatives and organizations is a valuable improvement to the socioeconomic conditions surrounding the Zuni Mountain project area. A couple examples of partnerships supported by the Zuni Mountains CFLR:

- While treatments on federal land were stalled due to the Mexican Spotted Owl injunction, New Mexico State Forestry worked quickly with local contractors to stabilize wood processing infrastructure through treatments on private lands in the Zuni Mountain project boundary using funding through the state’s Forest and Watershed Restoration Act (FAWRA).
- This additional treatments secured under FAWRA were key in providing a wood supply to the Mount Taylor Manufacturing Mill in 2020 because of the MSO Injunction that halted implementation within the CFLR. New Mexico State Forestry Division invested over \$600,000 to treat around 640 acres on private land within the CFLR footprint, which complemented previous restoration treatments on NFS lands to create a more comprehensive restoration across the landscape. Without this timely investment, there was a high likelihood that the mill would have had to close its doors.
- Cottonwood Gulch and an organization called Chizh for Cheii partnered to provide food and fuelwood to Navajo Nation elders during the onset of Covid-19. Cottonwood Gulch, a longtime partner of the Zuni Mountains Collaborative, has a basecamp within the Zuni Mountain CFLR boundary in Thoreau, NM. The forest health thinning treatments they have completed over the last 20 years have generated an abundance of wood that they donate and help transport to Navajo Nation communities through the support of Chizh for Cheii.





Choose at least four of the socioeconomic indicators below that are most relevant and important for your project.

Next, fill out the table below: please provide a brief description of any **qualitative or quantitate** information on CFLRP impacts, as well as links where available. Please indicate successes and where there are opportunities for improvements.

- Responses to surveys about collaboration conducted locally
- Ease of doing business
- % Locally retained contracts
- Contributions to the local recreation/tourism economy
- Volunteer/outreach participation
- Duration of jobs
- Job training opportunities/per capita normalize
- Seasonal housing capacity
- Economic dependency/sectors impacted/expanding market development
- % Minority owned local business contracts
- Special Use authorizations
- Project partnership composition
- Social media analytics
- Agency requests for information/data
- Media citations
- NFS Visitation - Distance Traveled
- Regulatory compliance
- Public input in political processes
- # Cross-institutional agreements/policies
- Community support for relevant initiatives
- Relationship building/collaborative work
- Preserving cultural heritage of sites/resources
- Subsistence
- Tribal Connections

Enter your four (or more) most important indicators in the table below (*text in red below are examples*):

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
Responses to surveys about collaboration conducted locally	Completed the monitoring diagnostic amongst the Zuni Mountains Collaborative. We had useful discussion around data management/availability and thought that this would have been a helpful discussion to have had earlier in our CFLR process. There was also some interesting discussion around monitoring indicators and how well these are developed and communicated to the collaborative.	https://static1.squarespace.com/static/57a36192f5e231c1eb0805f4/t/5fc6a46261e25426e121f0e3/1606853730927/Zuni+Mountains+CFLRP+Monitoring+Diagnostic.pdf
Contributions to the local recreation/tourism economy	Mt. Biking continues to become an important source of recreation and tourism dollars in the Zuni Mountains, benefitting Cibola and McKinley County, as well as the Cities of Grants and Gallup. Events such as the 24-hours in the enchanted forest, the Quartz Crusher, and the Zuni Mountain 100 draw cyclists from around the Southwest to the Zuni Mountains. Trail improvements, realignments, and new signage continue on the Puerco side of the CFLR. It is often beneficial to complete restoration work before trail improvements to minimize mitigation and rehabilitation, and better fit them into the newly restored landscape	<p>The 1st article is from 2017 but the work described for the Zuni Mountains Trails Project is ongoing through partnerships with local cities, governments, and user groups.</p> <p>https://www.abqjournal.com/1024514/zuni-mountain-network-aims-to-become-the-ultimate.html</p> <p>https://www.mtbproject.com/trail/532931/zuni-mountain-100-route</p> <p>https://www.cibolatrails.org/zuni-mountain-trails</p> <p>The following article is also from 2017 but the work described for the Zuni Mountains Trails Project is ongoing in conjunction with forest restoration.</p> <p>https://www.abqjournal.com/1024514/zuni-mountain-network-aims-to-become-the-ultimate.html</p>
Project partnership composition	Collaboration amongst diverse partners within the CFLR landscape remains a cornerstone of forest restoration work in the Zuni Mountains. Members of the collaborative include state and federal land management agencies, county government, tribes, soil and water conservation districts, residents, recreation user groups, students, and non-government organizations.	http://www.zunimountaincollaborative.org/partner-directory
% Locally retained contracts	100% of the jobs accounted through socio-economic monitoring efforts were for local contractors and employees based out of the Grants, NM area.	http://mttaylormanufacturing.com/sawmill/
Relationship building/collaborative work	In 2020, partnerships supported through the Zuni Mountain CFLR contributed to improve social and economic condition in the project landscape. While treatments on federal land were stalled due to the Mexican Spotted Owl injunction, New Mexico State Forestry worked quickly with local contractors to	<p>This blog post shares more information about New Mexico State Forestry’s role in stabilizing wood processing jobs in the Zuni Mountain landscape:</p> <p>http://www.zunimountaincollaborative.org/blog/2020/1/14/successful-collaboration-</p>

Indicator	Brief Description of Impacts, Successes, and Challenges	Links to reports or other published materials (if available)
	<p>stabilize wood processing infrastructure through treatments on private lands in the Zuni Mountain project boundary using funding through the state's Forest and Watershed Restoration Act. Cottonwood Gulch and an organization called Chizh for Cheii partnered to provide food and fuelwood to Navajo Nation elders during the onset of Covid-19. Cottonwood Gulch partnered with Fire Adapted Communities New Mexico to host a learning exchange for Gallup/Grants forestry and fire professionals and community leaders about landscape wildfire risk reduction treatments in the project landscape.</p>	<p>and-brave-use-of-a-new-authority-securing-a-future-for-mt-taylor-millworks This newsletter shares more information about Cottonwood Gulch's partnership with Chizh for Cheii and the Navajo and Hopi Families Covid-19 relief effort to provide food and fuel wood to Navajo communities within the Zuni Mountain landscape: https://www.cottonwoodgulch.org/partnerships-that-meet-community-needs/</p> <p>This blog post shares more information about the Fire Adapted Communities learning exchange that The Forest Stewards Guild hosted in partnership with Cottonwood Gulch to provide an opportunity for peer-learning about wildfire adaptation amongst organizations, agencies, and private landowners in the Zuni Mountains landscape: https://facnm.org/news/2019/12/2/the-western-jemez-and-gallup-grants-learning-exchanges-a-review-9blrx</p>
Job training opportunities/per capita normalize	<p>By two important measures, FTE and individuals employed, the Zuni Mountain CFLR continues to provide job training and employment opportunities for local communities. Youth and fire fighter training also provide a bridge to longer term and higher paying jobs through programs like the Forest Stewards Youth Corps and the Forest Stewards Guild CFRP grant.</p>	<p>https://foreststewardsguild.org/fsyc-program/</p> <p>Hire announcement for Guild CFRP Rx fire crew</p>
Duration of jobs	<p>Seasonal by nature and weather dependent, the mill processing, harvesting & trucking sectors have the closest ratio of FTE to individuals employed indicating stable, long-term employment.</p>	
Website Analytics	<p>The Zuni Mountains Collaborative website received 1,200 pageviews in 2020 from 600 unique visitors. This website serves as an important resource for information sharing amongst project partners in the Zuni Mountains landscape.</p>	<p>View the Zuni Mountains Collaborative website: http://www.zunimountaincollaborative.org/</p>

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

In February of 2020, members of the Zuni Mountains Collaborative met in Grants to discuss the multi-party monitoring process. During the February meeting, Collaborative members were updated on the status of vegetation, water quality,

and socioeconomic monitoring. A 2-page monitoring update was distributed with findings from an analysis of vegetation monitoring conducted in 2019 by Three Pines Forest Research, Jefferson Natural Resources, and The Forest Stewards Guild. The 2-page monitoring update was helpful for making monitoring analysis accessible to all collaborative members and there was interest in developing additional short formal monitoring updates for understory vegetation monitoring and socioeconomic monitoring.

In June of 2020, the Zuni Mountains Collaborative completed a monitoring diagnostic to evaluate the effectiveness of the Zuni Mountain CFLR's collaborative monitoring process. The diagnostic helped the collaborative understand where the project is with regard to monitoring and what could be improved. Collaborative members identified concerns around data management and accessibility to collaborative members within this process.

Also in June of 2020, Guild staff installed new water quality monitoring devices in Zuni Bluehead Sucker (ZBS) habitat areas at Tampico Draw and Agua Remora. After consulting with members of the multi-party monitoring team, Guild staff revised the data collection method for continuous water quality data collection. All of the devices that had been in use since 2013 had either been stolen/tampered with. New devices were purchased in 2020 and installed above and below the confluence of Tampico Draw and in the middle pool of Agua Remora. New devices do not measure electrical conductivity, which as members of the multi-party monitoring team agreed, is not a critical parameter to measure. A new method for placing the devices in the stream was also used in 2020. Previously, devices were tied to ropes/wires and tied on the stream bank. In 2020 we utilized a new method of securing the devices in PVC containers that were then tied using heavy gauge stainless steel wire to a cinder block, which was then placed in the streambed. Guild staff worked with members of the Mt. Taylor Ranger District Forest Stewards Youth Corps (FSYC) to install the devices in Tampico Draw. This was the first visit of an FSYC crew to Tampico Draw. Guild staff used the trip as an opportunity to educate the corps members about the Zuni Mountains CFLR and teach them about water quality monitoring.



Photo 1: An FSYC crew member in Tampico Draw

The Collaborative's Remote Automated Weather Station (RAWS) was maintained and upgraded in 2020 with a new modem and antenna that will work with the new 5g network. Data from the weather station was shared with Western Regional Climate Center.



Photo 2: Sam Berry with The Forest Stewards Guild installs new antenna on the RAWS

The Forest Stewards Guild, through our Participating Agreement for monitoring in the CFLRP, contracted out 86 permanent plots installed within Mexican spotted owl (MSO) protected habitat. The purpose was to provide actual on-the-ground data to inform existing conditions and what, if any, treatments were needed to improve habitat and reduce fire risk. Previous data had been imputed using the nearest neighbor program. In addition, over 1,000 acres of Recovery Nest Roost habitat were assessed using quick plots to determine quality and diagnose potential treatments.

The partners gathered again virtually for an All Hands virtual meeting on December 9, 2020 to discuss this year's annual report, update(s) on the Mexican spotted owl (MSO) Injunction, ongoing collaboration during implementation within the Rio Puerco project area, FAWRA treatments on private lands through NM State Forestry, MSO monitoring, water quality monitoring improvements, and a diversity, equity, inclusion, and justice statement and land acknowledgement from the Zuni Mountains Collaborative.

- *What parties (who) are involved in monitoring, and how?*

The Forest Stewards Guild, Great Old Broads for Wilderness, University of New Mexico and individual members of the Zuni Mountain Collaborative have volunteered to assist with water quality monitoring.

- *What is being monitored? Please briefly share key broad monitoring results and how results received to date are informing subsequent management activities (e.g. adaptive management), if at all. What are the major positive and negative ecological, social and economic shifts observed through monitoring? Any modifications of subsequent treatment prescriptions and methods in response to these shifts?*

Water quality in stream reaches the are home to the threatened and endangered Zuni Bluehead Sucker, climatological data, wildlife habitat, and implementation and effectiveness of treatments are monitored.

Monitoring results are shared annually through All Hands meetings and through the website, and have been overwhelmingly positive. Early in the life of the Zuni Mountain CFLR, some forest restoration prescriptions were seen to be heavy handed in terms of tree density post-treatment, but prescriptions were adjusted through the collaborative and adaptive management processes (field trips, meetings and annual updates. In addition, a large and old tree retention strategy was adopted in 2015 in response to concerns from members of the collaborative.

<http://www.zunimountainscollaborative.org/documents>

- *What are the current weaknesses or shortcomings of the monitoring process? How might the CFLRP monitoring process be improved?*

Data sharing has been an area identified for needing improvement. Inability of partners to access forest databases.

- *Please provide a link to your most up-to-date multi-party monitoring plan and any available monitoring results from FY20.*

<https://static1.squarespace.com/static/57a36192f5e231c1eb0805f4/t/5e614f3965f6e80c57a7a0f2/1583435581090/MonitoringUpdateFinal.pdf>

In February of 2020, we held our first virtual annual Collaborative Group meeting. The MSO Injunction was still a relatively new phenomenon and optimism was high that it would be lifted by the time field season began in April. This meeting reviewed 2019 accomplishments as well as planning and direction for FY20. In August of 2020, members of the Zuni Mountains Collaborative met in Grants to perform a monitoring self-assessment, which helped identify strengths and weaknesses of monitoring efforts in the project landscape. A summary of that meeting is available by following the link to the Collaborative Diagnostic in the first row of the Indicators Table above.

6. FY 2020 Agency performance measure accomplishments:

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$) (Contract Costs) ³
Acres of forest vegetation established FOR-VEG-EST	Acres	1	\$2,928
Acres of forest vegetation improved FOR-VEG-IMP	Acres	1,300	\$1,300,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	14.3	\$5,250
Miles of high clearance system road improved RD-HC-IMP	Miles	10	\$129,782
Volume of Timber Harvested TMBR-VOL-HVST	CCF	0	No timber harvest volume due to the MSO Injunction.
Volume of timber sold TMBR-VOL-SLD	CCF	5287	Volume was generated from acres funded through the NWTf Stewardship Agreement at \$1000/acre
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	1,300	Integrated target from acres of forestlands treated

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

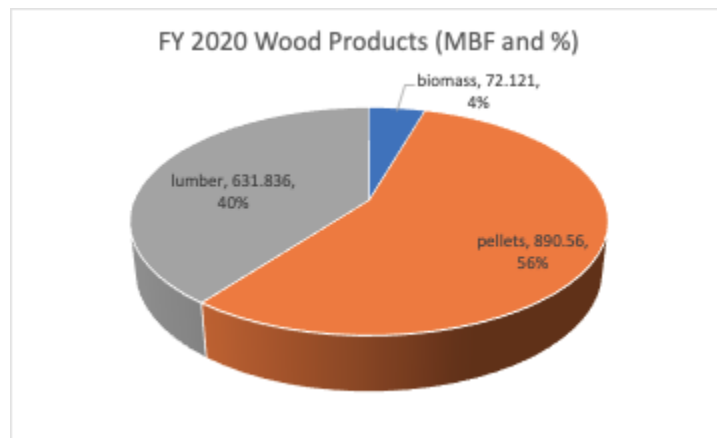
Units accomplished should match the accomplishments recorded in the Databases of Record.

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 an 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).

A key achievement in FY20 was the award of an additional 531 acres under the NWTF Stewardship agreement for harvest and removal of ponderosa pine which has enabled the local sawmill to have an additional ½-1 year of material to harvest. In addition to this, removal of timber occurred on approximately 1,383 acres of prior year’s awarded acres via the NWTF Stewardship Agreement and completed in FACTS.

Another key achievement was the signed Decision Notice for the Puerco Project, which will incorporate a wider range of restoration activities. A key lesson learned from implementing the Bluewater Decision were the limitations for only thinning and prescribed burning that prohibited accomplishing the entire suite of activities needed to accomplish restoration at a landscape scale. Puerco includes targeted watershed and stream treatments separate from thinning and burning, and range infrastructure improvements (tanks, wells, piping) that will disperse livestock better and reduce current impacts.

Mount Taylor Manufacturing, the sawmill processing all material harvested within the Zuni CFLR landscape, continues to produce a diverse array of products. The graph below shows the product breakdown for FY 20.



The efficient and creative use of small diameter wood in the Zuni Mountains continued in FY 2020. Wood from the Zuni Mountains is supporting several sectors of Mount Taylor Manufacturing including a sawmill, pellet plant, and machine shop in Milan, NM and the pellet plant in Albuquerque. Each of these sectors is supported by and in turn supports utilization of woody biomass generated by restoration work in the CFLR. The pie chart below provides a breakdown of the types of products being created.

There is mutual benefit shared amongst the harvesters, truckers, and wood products industry in the Zuni Mountains. The success of those supply chains has ripple effects that the court ordered injunction on timber management activities laid bare at the tail end of FY 2019 and throughout 2020. Harvesters and the sawmill operator both expressed concern regarding the sustainability of their operations if the injunction continues into 2020. If it wasn't for the acres treated on private lands, made available through NM State Forestry Division, MTM may have had to shut down.

Through the Shared Stewardship prioritization process, the Zuni Mountains did not make the top 25 project list for Risk to Communities, Risk for Water, or Risk to Biodiversity. Nor were they clustered within the top 4 priority planning areas.

However, the NEPA Decision and surveys are completed for another 30,000+ acres of restoration treatments, which puts it years ahead of most priority areas. There is a long history of investment into restoring the Zuni Mountains through various partners and keeping the sawmill operating is a regional and state priority, as evidenced by the private landowner agreements made during the injunction. The Zuni Mountain CFLRP has a proven track record of getting acres treated, so even though the Zuni Mountains do not rank high among Shared Stewardship priorities, we are optimistic that outside or year-end funding will still be available. This low prioritization also makes a strong case for the need to extend funding for this CFLRP beyond 2021, particularly as higher priority areas complete NEPA.

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 [posted here](#) 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	14 acres
Estimated Cumulative Footprint of Acres (2012 through 2020)	128 acres Aspen enhancement, 9,165 acres ponderosa pine thinning, 5,500 acres Rx burning, 1,260 acres of Wildlife Habitat Improvement via road decommissioning 20 acres of invasive species treatment. 157 miles passenger car road maintenance 137 miles of high clearance road maintained/improved 25 miles of road decommissioned 12,797 acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions 8,045 Acres of Terrestrial habitat restored or enhanced

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).

In September of 2019 an injunction was placed on all New Mexico National Forest and the Tonto National Forest in Arizona. Due to the MSO injunction, no operation on federal lands occurred in the Zuni Mountain CFLRP footprint in 2020. A settlement was reached between the WEG and the US Forest Service October 27th, 2020 dissolving the injunction. It was discovered that the 5-year MSO survey had not been completed, triggering the need for a full two years of MSO survey in planned prescribed fire and mechanical thinning blocks. Approximately 889 acres of the remaining Bluewater mechanical thinning areas are located outside of MSO habitat and have been cleared to harvest as soon as possible. The remaining 698 have had one years of MSO survey and are pending the second year MSO survey in

the summer of 2021. All wildlife survey's in the Puerco project are current, and already planned for their 5-year surveys to begin in the summer of 2022.

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?

10. Planned FY 2021 Accomplishments

Performance Measure Code	Unit of measure	Planned Accomplishment for 2021 (National Forest System)	Planned Accomplishment on non-NFS lands within the CFLRP landscape⁴
Acres of forest vegetation established FOR-VEG-EST	Acres	1,000	500
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	10	
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles		
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres		
Miles of road decommissioned RD-DECOM	Miles		
Miles of passenger car system roads improved RD-PC-IMP	Miles		
Miles of high clearance system road improved RD-HC-IMP	Miles	10	
Volume of timber sold TMBR-VOL-SLD	CCF	5,900	2,950
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons		
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre	1,000	
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres		

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 if planned FY 2021 accomplishments and/or funding differs from CFLRP project work plan (no more than 1 page):

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. Give your best estimate at this point; if it's unknown how much work will occur off NFS lands, simply state unknown.

The original proposal had a suite of contractors that were going to work together and manufacture and market wood products jointly for some emerging markets. At that time, we estimated the cost per acre of treatment (Goods for Services) via the Stewardship Agreement to be \$300/acre. By the time we submitted the proposal in 2011 and it was awarded in 2012 the industry partnership had dissolved, and two businesses went under and one relocated. Mt Taylor Manufacturing was the last one standing. So, Mt Taylor Manufacturing (MTM) had to seek out a new partner to do the woods operations (logging, harvesting, and fuels work). With limited companies to work with, Mt Taylor located a fledgling logging business (BRL, Inc.) from Arizona to relocate and work in New Mexico, along with WW Logging. Due to both Mt Taylor and the loggers being new businesses, the economy, gas prices, and establishing new markets, we received higher bids to do the service work, then originally estimated. In addition, as operations have continued moving westward, away from the mill, transportation costs have increased.

If we were to maintain an annual output of 2,000-3,000 acres/year at the increased price of \$1,000/acre instead of the original estimate of \$300/acre then the total harvesting project cost increases from \$2-3,000,000. The Forest worked very hard to put together a proposal that could be matched with annual anticipated funds for the \$800,000 match. We do not have additional dedicated funds to cover the increased operating costs. The only option the Cibola has had is to pursue additional funds either Nationally, Regionally or with partners such as New Mexico Game and Fish or New Mexico Department of Forestry. The Forest has been successful in securing funds to cover the additional cost through end of year monies and partner contributions.

BRL decided that it could not afford to make a living, even with the increase to \$1,000/acre, as the project continued move farther west. At the end of the 2019 operating season, coinciding with the MSO Injunction, WW Logging also decided that its fortunes could be better achieved elsewhere. Because of the Mexican Spotted Owl Injunction, the entire 2020 logging season was lost. In order to stay afloat, MTM has contracted with NM State Forestry to perform forest restoration work on private lands within the CFLR footprint to keep a supply of logs coming into the mill. The tentative short-term plan was to have one logger work on private land and another work on NFS Lands at a projected pace of 2-3,000 acres per year on both ownerships. So far, MTM has been able to contract with Forest Fitness, LLC for all the work completed on private land and the expectation is that they will be able to ramp up to about 1,500 acres per year. Another continuing hardship for MTM has been finding experienced log truck drivers that can transport enough material to fill the log yard to supply wood through the winter.

The Cibola is utilizing a Stewardship Agreement to conduct most of the Restoration treatments. Timber Sales are only used on a small scale with a handful of small users wanting more specialty products like vigas and latillas. Agreements provide the flexibility to receive year-end funds and leverage treatments to attract a variety of partners interested in investing into the project.

In FY19 the Forest was committed to the scale-up of prescribed fire in the landscape with the addition of the Collaborative Forest Restoration Program (CFRP) funded prescribed fire crew. The season was very wet, so the crew focused on unit prep as there were no prescribed fires during their employment period. In addition to the crew, the CFRP is adding cross-jurisdictional burning to the landscape and bringing the TRES program (Prescribed Fire Training Exchange) to the landscape. These TRES events were scheduled to begin in 2020. Although hampered by the pandemic, the summer Forest Stewards Youth Corps crew of 16-18 year old's continued in FY20, and they completed a suite of conservation work projects in the landscape such as improving recreation sites, fence repair, erosion control, and fire-line construction.

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

<http://www.zunimountaincollaborative.org/partner-directory>

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.

The following link shows a 10-minute NWTF video documenting a successful turkey hunt in the Zuni Mountains from areas that were recently prescribe burned and actively being harvested (released April 2020).

<https://tv.nwtf.org/2020/04/09/beyondthestrut-new-mexico/>

The following links to a NWTF page that describes positive community impacts, partners involved and habitat improvement.

<https://www.nwtf.org/conservation/article/merriams-zuni-mountains>

Matt Allen of Mt Taylor Manufacturing discusses the impacts of the WEG injunction on the mill and local economies in Grants and Albuquerque.

<http://www.zunimountaincollaborative.org/blog/2020/1/10/discourse-about-the-injunction-on-kunm-radio-firewood-and-forest-health-in-new-mexico>

Signatures:

Recommended by (Project Coordinator(s)): _____

Approved by (Forest Supervisor(s)): _____

Draft reviewed by (collaborative chair or representative): _____