

CFLR Project (Name/Number): Grandfather Restoration Project / 019

National Forest(s): Pisgah National Forest

Responses to the prompts in this annual report should be typed directly into the template. Example information is included in red below. Please delete red text before submitting the final version.

1. Match and Leveraged funds:

a. FY15 Matching Funds Documentation

Fund Source – (CFLN/CFLR Funds Expended¹)	Total Funds Expended in Fiscal Year 2015(\$)
CFLN15	\$399,198
CFLR13	\$106,854
Fund Source – (Funds expended from Washington Office funds (in addition to CFLR/CFLN)² (please include a new row for each BLI))	Total Funds Expended in Fiscal Year 2015(\$)
WFHF	\$192,305
TOTAL	\$698,357

Fund Source – (FS Matching Funds (please include a new row for each BLI)³)	Total Funds Expended in Fiscal Year 2015(\$)
CMRD	\$20,195
CMTL	\$34,834
CWFS	\$7,912
CWKV	\$62,290
NFLM	\$8,542
NFMG	\$12,900
NFVW	\$122,051
NFWF	\$24,431
RTRT	\$68,379
SPFH	\$21,099
WFHF	\$5,615
TOTAL	\$388,248

Fund Source – (Partner In-Kind Contributions⁴)	Total Funds Expended in Fiscal Year 2015(\$)
North Carolina Wildlife Resources Commission	\$70,684
North Carolina Forest Service	\$10,000
MountainTrue	\$3,916
Wild South	\$9,594
Southern Area Wilderness Stewards	\$24,479
The Nature Conservancy	\$7,170

1 This amount should match the amount of CFLR/CFLN dollars obligated in the PAS expenditure report. Include prior year CFLN dollars expended in this Fiscal Year.

2 This value (aka carryover funds or WO unobligated funds) should reflect the amount expended of the allocated funds as indicated in the FY15 program direction, but does not necessarily need to be in the same BLIs or budget fiscal year as indicated in the program direction.

3 This amount should match the amount of matching funds obligated in the PAS expenditure report. These funds plus the Washington Office funds (unobligated funds) listed above should total the matching funds obligated in the PAS report.

4 Total partner in-kind contributions for implementation and monitoring of a CFLR project. Partner contributions for Fish, Wildlife, Watershed work can be found in WIT database. Please list the partner organizations that provided in-kind contributions.

Fund Source – (Partner In-Kind Contributions ⁴)	Total Funds Expended in Fiscal Year 2015(\$)
The Wilderness Society	\$7,565
Linville Gorge Area Volunteers	\$65,235
Vermont Youth Conservation Corp	\$10,500
TOTAL	\$209,143

b. Please provide a narrative or table describing leveraged funds in your landscape in FY2015 (one page maximum). Leveraged funds refer to funds or in-kind services that help the project achieve proposed objectives but do not meet match qualifications. Examples include but are not limited to: investments within landscape on non-NFS lands, investments in restoration equipment, worker training for implementation and monitoring, and purchase of equipment for wood processing that will use restoration by-products from CFLR projects. See “Instructions” document for additional information.

Description of item	Where activity/item is located or impacted area	Estimated total amount	Forest Service or Partner Funds?	Source of funds
Prescribed fire for fuel reduction	81 privately owned acres within CFLR landscape	\$2,430	Partner Funds	North Carolina Forest Service

The North Carolina Forest Service assisted in implementation of the Wilson Creek prescribed burn that included private and Forest Service ownership.

2a. Discuss how the CLFR project contributes to accomplishment of the wildland fire goals in the 10-Year Comprehensive Strategy Implementation Plan and describe the progress to date on restoring a more fire-adapted ecosystem, as identified in the project’s desired conditions. This may also include a description of the current fire year (fire activity that occurred in the project area) as a backdrop to your response (please limit answer to one page).

In FY2015 there were 30 wildfires within the project area for a total of 2,935 acres. 26 wildfires were human caused. Of the human caused wildfires, the majority had a point of ignition on state jurisdiction before entering federal lands. All human caused fires were suppressed. 4 wildfires were caused by lightning strikes. Of these natural ignition fires, 1 was fully suppressed due to proximity to structures at risk. The 3 remaining fires were managed using a “confine and contain” strategy which included managing for multiple objectives.

The Blue Gravel wildfire (May 2015), located in a remote area near the Linville Gorge Wilderness, allowed for an appropriate management response that included both containment and management of the fire for resource benefit, rather than full suppression. After initial attack operations proved unsuccessful, Forest Service responders assessed values at risk in the area as well as risk to firefighters. Due to previous fires in the Linville Gorge area, the district staff has a strong understanding of resources at risk in the area, and determined that risks to firefighters constructing line in difficult terrain made it advantageous to



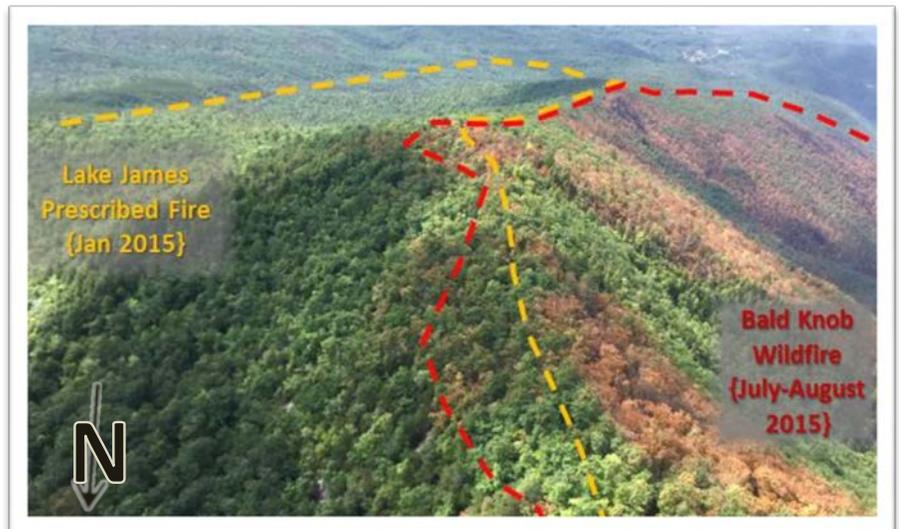
fall back to containment lines established on previous wildfires. Within the established fire lines, the fire was allowed to grow slowly, reducing forest fuels that could contribute to severe fires in the future and providing opportunity for new vegetation to grow that will benefit wildlife. Low, backing fires moved through fire-adapted shortleaf pine restoration areas, which are managed as part of the Grandfather Restoration Project. Soaking rains allowed for full containment of the wildfire at 521 acres.

The Wolf Creek wildfire and Bald Knob wildfire (July 2015) burned 305 acres and 1,200 acres respectively. The Bald Knob fire provides a great example of how the CFLRP project contributes to accomplishing wildland fire goals. The Grandfather Restoration Project fuel treatments were key in deciding that the appropriate fire management response to the Bald Knob wildfire was to manage the wildfire for resource benefits while providing for fire fighter and public safety. These treatments along with the management strategy for this wildfire moved the vegetation closer towards the desired condition of fire resilient landscapes. Through the collaborative process, the Grandfather Restoration Project is reducing risk and helping to create fire adapted communities. The Grandfather Restoration Project along with management of the Bald Knob Fire clearly demonstrates success in meeting the three goals of the Cohesive Strategy (resilient landscapes, fire adapted communities, and safe and effective wildfire response).

2b. In no more than two pages (large landscapes or very active fire seasons may need more space), describe other relevant fire management activities within the project area (hazardous fuel treatments will be documented in Question #6):

In FY2015, 3 of the 4 lightning strike fires within the CFLRP boundary were managed through a “confine and contain” strategy for multiple objectives. The largest of those fires was the Bald Knob Wildfire.

A lightning strike started the Bald Knob fire on July 14th. The ignition point was situated in rugged, back country terrain, limiting firefighter access. Fortunately, the surrounding area received fuel treatments and had seen past wildfires which afforded managers the opportunity to manage the fire to meet resource objectives while minimizing risk and exposure of firefighters. The strategic placement of the fuel treatments along with the past wildfires allowed for the appropriate response to this wildfire to be one that focused on restoring fire adapted ecosystems and reducing fuels while providing for fire fighter safety and community protection. Collaboration with adjacent landowners and partners through the CFLRP was as critical in the planning and implementation of the fuel treatments as it was to the successful management of the Bald Knob fire.



The James Lake prescribed burn was treated in January 2015 and stopped progression of the Bald Knob fire on the southeastern edge, creating a barrier to nearby communities and private land. The Clinchfield prescribed burn, treated in FY 2014, provided protection to several nearby residents west of the wildfire by allowing firefighters to utilize existing fuels breaks to contain the wildfire. Likewise, the Dobson Knob prescribed burn, treated in FY 2014, would have provided control opportunities for fire fighters had the wildfire grown that large towards the northeast. All of these treatments were critical in containing the fire and were used in the decision for managing the fire for resource benefit.

Existing lines from the surrounding prescribed burns were used in the confine and contain strategy for the Bald Knob fire. The only prescribed fire area that experienced fire activity in the Bald Knob fire was the Lake James burn. On August 5th a localized thunderstorm with high winds allowed the wildfire to spot across the control line into the Lake James burn unit which had been prescribed-burned six months earlier. The combination of topography, aspect, short-term weather event, and vegetation condition allowed the spots to occur. However once the wind diminished, the spot fire self-extinguished almost immediately with no intervention.

The Lake James fuel treatment clearly influenced the spread of the wildfire. CFLR monitoring plots in the Lake James treatment area showed a significant reduction in Mountain Laurel and Rhododendron shrub height throughout the burn unit. The decrease in this highly volatile live fuel within the burn unit when compared to the surrounding untreated area was significant in reducing spread of the wildfire. The Clinchfield and Dobson knob prescribed burn units experienced a similar reduction in Mountain Laurel and Rhododendron, providing a fuel break that supported the management decision.

Prior to the wildfire, the collaborative efforts of the Forest Service and partners set the stage for communicating with adjacent landowners and communities. Fire officials held numerous public meetings to provide information on fire behavior and strategies. While some members of the public still expressed concern that the agency did not use all the tools at its disposal, there was a prevailing opinion in the local community that the fuel conditions in the Bald Knob fire area posed a hazard to local residences and managed fire was the only option for reducing that hazard. Consistent and regular public communication helped build community support for the objectives and the tactics used to manage this fire. “This mountain needs to burn” was a sentiment expressed by several members of the local community at the public meetings. “Everyone who lives near here knows that mountain will burn one day.”

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 – <http://www.fs.fed.us/restoration/documents/cflrp/R-CAT/TREATUserGuide10112011.pdf>.

The numbers below were derived from actual expenditures with estimates of percent of contracted and force account work. Table 1 used 60% contracted and 40% force account labor and Table 2 used 58% contracted and 42% force account labor.

FY 2015 Jobs Created/Maintained (FY15 CFLR/CFLN/ WO carryover funding):

Type of projects	Jobs – Full and Part Time		Labor Income ⁵	
	Direct	Total	Direct	Total
Commercial Forest Product Activities	3	6	\$159,147	\$249,370
Other Project Activities	13	14	\$217,774	\$244,129
TOTALS:	16	20	\$379,337	\$496,730

FY 2015 Jobs Created/Maintained (FY15 CFLR/CFLN/ WO carryover and matching funding):

Type of projects	Jobs – Full and Part Time		Labor Income ⁶	
	Direct	Total	Direct	Total
Commercial Forest Product Activities	3	6	\$159,134	\$249,349
Other Project Activities	19	22	\$485,385	\$543,696
TOTALS:	22	28	\$647,026	\$796,398

⁵ Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet, “Impacts-Jobs and Income” tab. Spreadsheet and directions available at <http://www.fs.fed.us/restoration/CFLR/submittingproposals.shtml#tools>.

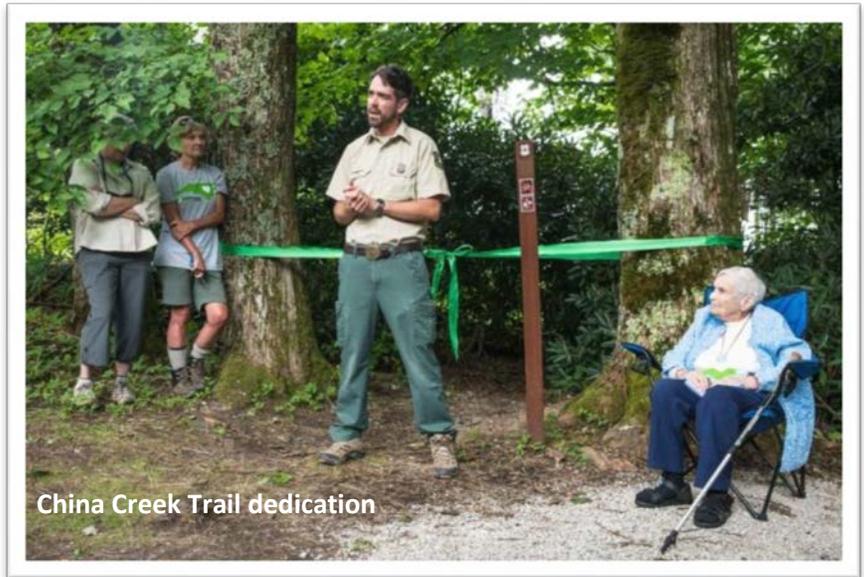
⁶ Values obtained from Treatment for Restoration Economic Analysis Tool (TREAT) spreadsheet, “Impacts-Jobs and Income” tab. Spreadsheet and directions available at <http://www.fs.fed.us/restoration/CFLR/submittingproposals.shtml#tools>.

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).

All contracted work associated with the project is advertised to local vendors first, and then expanded beyond the local community only when a local vendor is not found. Because of this focus, over 90% of project work is completed through local vendors. 100% of the timber harvested in FY2015 went to local mills. The increased funding through the CFLR and related activities has allowed for more local contracts and created a positive economic benefit for the local community.

Trail projects completed under the CFLR and related activities have enhanced recreation activities for hiking and mountain biking in local communities. In particular, the China Creek Trail relocation project was a beneficial project for the town of Blowing Rock, providing access from the town to Forest Service and National Park Service recreation areas. Local newspapers and partner news releases highlighted the success. "This spectacular trail adds a tremendous, new outdoor recreation opportunity for visitors to Blowing Rock and the High Country," explained a local resident. An unidentified hiker on the refurbished trail was heard to exclaim, "This is the best thing to happen in Blowing Rock in 30 years!"



Because our project area has such a large percentage of WUI, all prescribed fire treatments in FY2015 were in the WUI and benefited local communities through fuel reduction and education of the beneficial effects of fire. Communication efforts with local media and community groups have allowed for a higher degree of awareness in the community of fire risks and benefits. The impact of this focused communication was made clear in when working with local landowners in wildfire response efforts.

Multiple landowners have been involved in our invasive species treatment efforts along Wilson Creek. The area, which is a high-priority area for invasive treatment within the CFLR, has a large infestation of Japanese knotweed. Outreach efforts have targeted local landowners with property along Wilson Creek to educate them the negative effects of invasive and how to treat the species on their properties. Several landowners are working with the Forest Service to treat on their properties. Getting private landowners involved in this effort is critical to treating Japanese knotweed in Wilson Creek.

Community benefits were also achieved by involving volunteers from the local community and interns from local high schools and community colleges. A Leave-No-Trace hotspot even was held within the project area, focused on the Linville Gorge Wilderness, which brought in national educators to interact with the public and volunteers about wilderness stewardship. In addition, tours of the restoration projects for local university groups helped communities learn about the benefits of forest restoration. All of these community efforts lead to shared values in forest restoration and build on a community's sense of stewardship.

5. Based on your project monitoring plan, describe the multiparty monitoring process. What parties (who) are involved in monitoring, and how? 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 current weaknesses or shortcomings of the monitoring process? (Please limit answer to two pages. Include a link to your monitoring plan if it is available).

The Grandfather Restoration Project Collaborative has a monitoring committee that is open to all participants in the collaborative. The regular representatives on the committee include USFS, Western North Carolina Alliance, Wild South, The Wilderness Society, The Nature Conservancy, Forest Stewards, Southern Research Station, NC Forest Service and the NC Wildlife Resources Commission. The collaborative at large has prioritized monitoring efforts to include forest restoration (focusing on restoration of fire regimes), invasive species treatments, fish and wildlife habitat, watershed, roads, and trails, and social and economic impacts. The collaborative continues to follow the monitoring plan enacted in April 2014 when planning monitoring activities.

Early in FY2015, the collaborative identified a need to enter into multi-year monitoring agreements. With current year funding available to fund these efforts, the project entered into two large multi-year monitoring agreements that will provide support through 2018:

- (1) An agreement was established with Western Carolina University to monitor fire effects on vegetation. This agreement will use the vegetation monitoring methodology developed by the Southern Blue Ridge Fire Learning Network to monitor fire effects on vegetation. This methodology consists of installing .1 acre permanent plots that record all woody vegetation over 4" dbh, measuring sapling density in a nested sapling plot, recording percent cover of shrubs and herbs, and measuring fuels along three transects. The agreement will also provide analysis of data to allow for adaptive management in prescribed fire implementation.
- (2) An agreement was established with MountainTrue, a local non-profit organization, to monitor invasive plant species occurrence and treatment effectiveness. The agreement will focus on high priority areas identified as part of the CFLR. This agreement will provide survey assistance in identifying new treatment areas as well as look at the effectiveness of existing treatments. Monitoring efforts will allow specialists to test a variety of treatment methods to determine the most effective way to treat invasive plant species.

Following the Lake James Prescribed burn, collaborative members completed immediate post burn monitoring following the Southern Blue ridge Fire Learning Network methodology. This is the second burn in this unit and will provide information to managers about the effects of multiple burns on vegetation.

The Wilderness Society continued work on fire effects monitoring in the Linville Gorge Wilderness with a Duke University Masters Student. The data, collected in FY2014, fed into the analysis and thesis, completed in FY2015. This project looked at the effects of multiple wildfires on vegetation within the wilderness and used multi-variant analysis to determine the variables that contributed to fire intensity and vegetation response. This data provides a valuable look at wildfire impacts.

MountainTrue and Forest Service botanists monitored invasive species treatment effectiveness in the Wilson Creek area following treatments. This study looked at a grouping of common invasive plant species as well as a focused look at Japanese Knotweed. Invasive species monitoring was also completed in the Blue Gravel Fire area and the Bald Knob Fire area, as well as the Roses Creek Timber Sale area.

In FY2014, the monitoring committee designed and implemented a wildlife monitoring study using 25 trail cameras purchased through the CFLR. Working with the USFS, Wildlife Resources Commission, The Nature Conservancy, and researchers from North Carolina State University, a state-of-the-art wildlife camera study was used to determine



whether wildlife is benefiting from prescribed fire. In FY2015, an AmeriCorps intern at Mountain True analyzed the camera data and provided results showing that more animals use the burn units (both more in numbers and higher diversity of species), however, due to the small sample size no statistically significant results could be determined.

6. FY 2015 accomplishments

Performance Measure	Unit of measure	Total Units Accomplished ⁷	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) ⁸
Acres of forest vegetation established FOR-VEG-EST	Acres	151	\$229,243	CWKV NFVW RTRT SPFH
Acres of forest vegetation improved FOR-VEG-IMP	Acres	586		
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	306.4	\$61,988	CFLR NFVW Partner
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	44.4	\$22,671	CFLR SPFH
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres	1	\$25,390	CFLR CWFS
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	6301.8	\$49,987	CFLR NFWF CWFS Partner
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	25	\$45,422	CFLR CMRD
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	73		
Miles of road decommissioned RD-DECOM	Miles	10.5	\$41,834	CFLR
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	1	\$35,119	CFLR NFVW NFWF
Miles of system trail maintained to standard TL-MAINT-STD	Miles	60.5	\$55,102	CFLR CMTL Partner
Miles of system trail improved to standard TL-IMP-STD	Miles	1.3	\$62,137	CFLR NFMG CMTL NFWF

⁷ Units accomplished should match the accomplishments recorded in the Databases of Record.

⁸ Please use a new line for each BLI or type of fund used. For example, you may have three lines with the same performance measure, but the type of funding might be two different BLIs and CFLR/CFLN.

Performance Measure	Unit of measure	Total Units Accomplished ⁷	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) ⁸
				Partner
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles	9	\$15,743	CFLR NFLM
Volume of Timber Harvested TMBR-VOL-HVST	CCF	1205.1	\$15,262	CFLR
Volume of timber sold TMBR-VOL-SLD	CCF	3.4		
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	7497	\$103,646	CFLR WFHF Partner

7. FY 2015 accomplishment narrative – Summarize key accomplishments and evaluate project progress. (Please limit answer to three pages.)

Habitat Restoration: 1 acre of lake habitat restored, 6,301.8 acres of terrestrial habitat enhanced

- Lake habitat was restored at Boone Fork Pond, controlling erosion and adding fish habitat structures.
- Terrestrial habitat was restored through a variety of management, including maintenance of wildlife openings, mechanical restoration of the Lost Cove orchard, prescribed fire, timber stand improvement, and shortleaf pine restoration harvest activities.
- The North Carolina Wildlife Resources Commission supported wildlife activities across the district, including stocking of 4,000 native trout, mowing of 375 acres of wildlife openings, and 13 habitat surveys.

Invasive Species Treatments: 306.4 acres of nonnative invasive plant treatments, 44.4 acres of hemlock wooly adelgid treatments

- Invasive species were treated with herbicide in the Catawba River Floodplain, along Wilson Creek, along Back Irish Creek Rd, and outside the Wilderness around Table Rock. Paulownia was hand pulled inside the Wilderness.
- Wild South worked for over 500 hours on invasive species eradication, focusing on Paulownia, within the Linville Gorge wilderness and outside the wilderness within the Table Rock fire area.
- Hemlock wooly adelgid (HWA) treatments were continued for Carolina and eastern hemlock across the district. 22 acres were treated for the first time along the Catawba Falls trail.
- The Wilderness Society assisted in preparing reports for HWA treatments. Wild South inventoried hemlocks needing treatment in Linville Gorge.



Watershed Restoration: 1 aquatic organism passage installed, 10.5 miles of non-system roads decommissioned

- A large aquatic organism passage was installed along Simpson Creek, allowing for safe fish passage and maintenance of the natural stream channel.

- Law enforcement identified 10.5 miles of non-system roads and multiple trails that were decommissioned by placing boulders at entry points, reducing erosion into sensitive watersheds.

Trail Restoration: 1.3 miles of trails improved, 60.5 miles of trails maintained

- 3 miles of the China Creek trail near Blowing Rock was relocated to follow a historical route through work with the Vermont Youth Conservation Corp.
- Through USFS labor and contracts 60.5 miles of trails were maintained. This work included 10.5 miles of work completed through an agreement with the Southern Area Wilderness Stewards in Linville Gorge.
- The Southern Area Wilderness Stewards worked over 800 additional hours on trail maintenance within the Linville Gorge Wilderness.
- The Friends of the Mountain to Sea Trail volunteers worked over 1,800 hours on trail maintenance for the Mountain to Sea Trail. Friends of Linville Gorge and Gorge Rats volunteers worked over 1,300 hours on trail maintenance in Linville Gorge Wilderness.
- The Linville Gorge Mapping project worked over 1,000 hours on a comprehensive trail and ecosystem mapping project in the Linville Gorge.

Prescribed Fire: 7,497 acres of fuels treated

- Prescribed burns were conducted at the Lake James unit, the Woodruff Ridge unit, the Wilson Creek unit, and the Rockhouse unit.
- Site preparation burns were conducted as part of the Roses Creek timber sale.
- The Blue Gravel Fire, the Bald Knob Fire, and the Wolf Creek Fire were managed through a “confine and contain” strategy.
- The Nature Conservancy provided support for fire implementation with 2 qualified firefighters as well as education and outreach with the creation of a “Fire Learning Trail” of interpretive signs and accompanying social media.
- The North Carolina Forest Service and the North Carolina Wildlife Resource Commission provided support for prescribed fire implementation and participated in joint-agency landscape burns.

Timber and Silviculture: 151 acres of forest vegetation established, 737 acres of forest vegetation improved, 1,205 CCF of timber harvested

- Through the Roses Creek project, over 150 acres of shortleaf pine forest was established following the harvest of the remaining stands of timber.
- Timber harvest and vegetation improvement focused on removing white pine, tulip poplar and red maple and retaining oaks and yellow pines.
- Partners, including MountainTrue and The Nature Conservancy, provided support for identification of future project sites to be implemented under the new Farm Bill CE authority for Southern Pine Beetle recovery.



Partners discuss research at the Roses Creek Shortleaf Restoration site

Project Progress – Fire:

The district and the collaborative are really proud of the accomplishments in fire this year. This has been the largest number of acres receiving fire in a single year, and reflects changes in management direction toward managed wildfire as well as efficiencies gained in burning units multiple times. One particular success in the prescribed fire program was accomplishing both the Rockhouse and Wilson Creek units in a single day for 1,800 acres. This was the first time we have burned multiple units in a single day, and it was also the largest number of acres burned in one day.

The Rockhouse and Wilson Creek are two of our most established burn units, with the first burn in the Wilson Creek unit dating back to 1998. The Wilson Creek unit is a great example of the successful use of prescribed fire in the mountains, as the shrub layer has become minimal after repeated burns and we are now looking to maintain this open condition. The Rockhouse unit is also in good shape after multiple burns, but as we learned when we tried to burn it last summer, the shrub layer had too much time to regrow between the last two burn cycles, and so our goal on that unit was to knock back the shrubs to make it more receptive to a growing season burn.



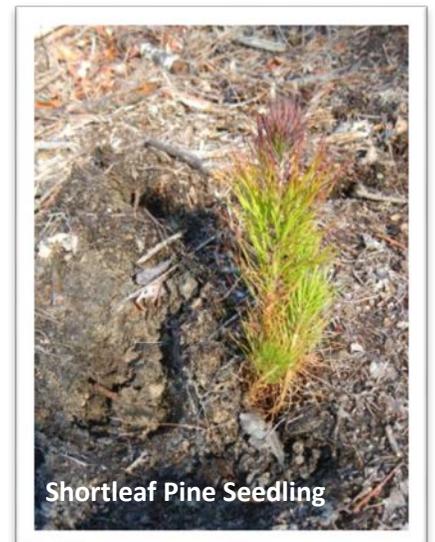
In proposing the CFLR project, we often talked about efficiencies gained through burning units multiple times, allowing us to reduce future costs. These two burns were a great example of achieving this efficiency. The condition of the fuels, as well as familiarity with the units, allowed the fire team here on the Grandfather to achieve a large number of acres in a single day while ensuring a safe environment for firefighters. We were able to use 1 helicopter for both units, which greatly minimized costs.

These burns also allowed for communication of the goals of the prescribed fire program under the Grandfather Restoration Project. A TV station from Charlotte, NC ran a story about the goals of the fire on the evening news. This spring, a local botanist did a guest post on the Grandfather Restoration Project Blog about the rare wildflowers that emerged following the burn.

Project Progress – Shortleaf Pine Restoration:

The shortleaf pine seedlings are in the ground at the Rose's Creek Project sites! This is the culmination of years of efforts — from planning, to harvest, to site prep burns — the Rose's Creek shortleaf pine restoration work is a great example of partners and Forest Service personnel from many resource areas working together to make a change on the landscape. This work aligns with the Shortleaf Pine Restoration Initiative, a project gaining steam in the Southern Region that hopes to model after the Longleaf Pine Restoration Initiative to promote the recovery of this declining species.

Although the seedlings are in the ground, the work on this project is not finished. Our silviculturists installed monitoring plots (1 per acre) to check planting density. These plots will also be used for 1-year survival checks. At that point, we will determine if an herbicide release is needed, targeting non-native invasive species and any competing hardwood sprouts. In addition to the silviculture plots a Research Forester with the Southern Research Station set up long-term regeneration plots to study competition at the shortleaf restoration sites. Data will be collected about the planted seedlings, competing tree seedlings, white pine regeneration in relation to seed sources, herbaceous cover, and site-prep burn severity. We are excited to partner with



the Southern Research Station to help inform next steps for the Rose’s Creek Project sites as well as future shortleaf pine restoration efforts.

8. Describe the total acres treated in the course of the CFLR project (cumulative footprint acres; not a cumulative total of performance accomplishments). What was the total number of acres treated?⁹

Fiscal Year	Total number of acres treated (treatment footprint)
Total in FY15	27,934 (cumulative)
FY10, FY11, FY12, FY13, FY14, and FY15 (as applicable-projects selected in FY2012 may will not have data for FY10 and FY11; projects that were HPRP projects in FY12, please include one number for FY12 and one number for FY13 (same as above))	FY12 – 5,622 FY13 – 6,528 FY14 – 5,947 FY15 – 9,837

Please briefly describe how you arrived at the total number of footprint acres: what approach did you use to calculate the footprint?

The footprint area was calculated using the actual accomplishments for fuels treatments (FP-FUELS-WUI), invasive species (INVSPE-TERR-FED-AC), lake habitat (HBT-ENH-LAK), forest vegetation established (FOR-VEG-EST), and forest vegetation improved (FOR-VEG-IMP). Terrestrial habitat accomplishments (HBT-ENH-TERR) overlapped areas for fuels treatments and forest vegetation established/improved, so only those acres recorded for maintenance of wildlife openings (375 acres) and restoration of an apple orchard (1 acre) were counted. Noxious weed accomplishments (INVPLT-NXWD-FED-AC) overlapped with managed wildfire areas, so only those areas outside fire areas were counted (250 acres).

Accomplishments recorded in units other than acres were converted to acres using the following methodology:

1. Road maintenance (RD-PC/HC-MAINT-MI) impacts a 60ft wide corridor to include road work and brushing. Roads decommissioned (RD-DECOM-MI) were also assumed to have a similar corridor. Total road accomplishments were 108.5 miles, for an equivalent 808 acres.
2. Trail maintenance (TL-MAINT-STD) and improvement (TL-IMP-STD) takes place within a 16ft corridor. Total trail accomplishments were 61.8 miles, for an equivalent 123 acres
3. Stream crossing mitigated to standard (STRM-CROS-MITG-STD) was assumed to impact 1 acre.
4. Landline accomplishments (LND-MAINT-STD) were not included, because there was no logical way to convert those 9 miles to acres.

9. Describe any reasons that the FY 2015 annual report does not reflect your project proposal, previously reported planned accomplishments, or work plan. Did you face any unexpected challenges this year that caused you to change what was outlined in your proposal? (please limit answer to two pages).

The FY2015 annual report generally reflects the previously planned accomplishments, with some minor differences due to the somewhat unpredictable timelines associated with NEPA and the new objections process, as well as delays in the implementation of funded contracts. All in all, FY2015 was an excellent year for the Grandfather Restoration Project, and targets were exceeded in all areas.

⁹ This metric is separate from the annual performance measurement reporting as recorded in the databases of record. Please see the instructions document for further clarification.

Additional CFLR funding from the Southern Regional Office allowed for additional accomplishments not reflected in previous year proposals. Specifically, this funding was used in the following projects:

- 10.5 miles of roads decommissioned
- 1 acre of lake habitat restored
- Additional acres of noxious weed treatments in the Catawba River floodplain
- Additional acres of invasive species treatments for hemlock wooly adelgid
- Additional miles of trails maintained to standard through contracts with partner organization Southern Area Wilderness Stewards
- Multi-year monitoring contract with partner organization Western Carolina University for fire effects monitoring
- Multi-year monitoring contract with partner organization MountainTrue for invasive species monitoring

Due to the busy fire season, the project saw additional cost savings in salary. This funding was used at the end of the year to enhance existing contracts that will fund work in FY2016. This work includes:

- Additional riparian restoration at the Simpson Creek project site
- Contracts for wilderness rangers through the Southern Area Wilderness Stewards to provide restoration of campsites, trail maintenance, and visitor education in the Linville Gorge Wilderness.

10. Planned FY 2017 Accomplishments¹⁰

Performance Measure Code¹¹	Unit of measure	Planned Accomplishment	Amount (\$)
Acres of forest vegetation established FOR-VEG-EST	Acres	50	\$25,000
Acres of forest vegetation improved FOR-VEG-IMP	Acres	250	
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	250	\$35,000
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres	25	\$10,000
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	5	\$45,000
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles	1	
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	3200	\$144,000
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	7.5	\$50,000

¹⁰ Please note that planned accomplishments are aggregated across the projects to determine the proposed goals for the program’s outyear budget justification. These numbers should reflect what is in the CFLRP work plan, with deviations described in question 12.

¹¹ Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2017 is available. Use actual planned funding if quantity is less than specified in CFLRP project work plan.

Performance Measure Code ¹¹	Unit of measure	Planned Accomplishment	Amount (\$)
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles	22.5	
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number	2	\$100,000
Miles of system trail maintained to standard TL-MAINT-STD	Miles	7	\$50,000
Miles of system trail improved to standard TL-IMP-STD	Miles	0.5	
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles	6	\$15,000
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	250	\$75,000
Volume of Timber Harvested TMBR-VOL-HVST	CCF	1750	
Volume of timber sold TMBR-VOL-SLD	CCF	1750	
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	5875	\$175,000

11. **Planned FY 2017 accomplishment narrative** (no more than 1 page).

In FY2017 we plan to have NEPA authority for the Armstrong Project, a watershed restoration project incorporating timber stand improvement, timber harvest, prescribed burning, and watershed and stream restoration. 10 acres will be treated to restore watershed function and resilience. 2 stream crossing will be reconstructed to provide for aquatic organism passage. 1 mile of stream habitat will be restored.

We are also planning for a Farm Bill CE targeting Southern Pine Beetle resilience through Southern Yellow Pine Restoration. We plan to treat an estimated 250 acres with timber sales for 1750 CCF of timber, improve 250 acres of vegetation, and establish 50 acres in planted shortleaf pine.

We will continue to treat NNIS in the Wilson, Catawba, and Linville drainages in the amount of 250 acres. We will restore and enhance 3200 acres of wildlife habitat through mechanical and herbicide treatments, as well as prescribed fire. 25 acres will be treated for hemlock wooly adelgid. We will maintain 30 miles of road to reduce sedimentation into streams. 10 miles of trail will be maintained or improved to reduce soil movement in nearby streams. 6 miles of property landlines will be marked to support project work. We will use prescribed fire to treat 5875 acres of fire adapted ecosystems using the fire prioritization model.

12. Describe and provide narrative justification if planned FY 2016/17 accomplishments and/or funding differs from CFLRP project work plan (no more than 1 page):

Funding for 2015/16 should match closely. Adjustments are expected to be made throughout the year as contracts are awarded and projects are implemented. This often produces a change in dollar amount for the project as planned. Changes are also expected for partner match throughout the year.

13. Please include an up to date list of the members of your collaborative (name and affiliation, if there is one). If the information is available online, you can simply include the hyperlink here. If you have engaged new collaborative members this year, please provide a brief description of their engagement.

*Denotes New member for FY2015	
Appalachian Designs	NC Forest Service
Defenders of Wildlife*	NC State Parks
Fish and Wildlife Service	NC Wildlife Resources Commission
Foothills Land Conservancy	North Carolina State University
Forest Stewards	Quality Deer Management*
Grandfather Mountain Land Conservancy*	Southern Appalachian Wilderness Stewards*
Land of Sky Regional Council	Southern Blue Ridge Fire Learning Network
Linville Gorge Area Volunteers*	Southern Research Station
MountainTrue	The Nature Conservancy
National Forest Foundation*	The Wilderness Society
National Park Service	Trout Unlimited
National Wild Turkey Foundation	Western Carolina University
NC Division of Water Quality	Wild South

The volunteer coordinator for the Linville Gorge Area Volunteers is a new member who has brought a strong focus on trail work, specifically within the Linville Gorge Wilderness Area. He is an active participant at meetings and is able to galvanize volunteer support around projects, report volunteer activities, and communicate project goals and accomplishments to volunteers and the public through the www.LinvilleGorge.net website and social media.

The collaborative member who represents the newly formed Defenders of Wildlife for Western NC was previously the representative for Wild South. He is interested in continuing with the collaborative in his new role, especially as it relates to threatened and endangered species habitat.

Representatives from Quality Deer Management have engaged with the collaborative and are especially interested habitat restoration and wildlife camera monitoring.

Southern Area Wilderness Stewards has engaged with the collaborative and provides support for trail maintenance and wilderness ethic. They are an active participant at meetings and bring a focus on recreation and wilderness.

The Grandfather Mountain Land Conservancy and National Forest Foundation have joined the collaborative email list but have not been formally engaged at meetings to date. Both partners are interested in staying up-to-date on the project and engaging as appropriate in future projects.

14. How has your project increased support from partners in terms of in-kind contributions and funding? (no more than one page):

In FY2015, the collaborative diversified its members, specifically to include more recreation interests. The addition of the Southern Area Wilderness Stewards and the Linville Gorge Area Trail Volunteers brings an immense amount of support and in-kind contributions from the local trail community.

15. **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.

Newspaper:

Asheville Citizen Times Guest Column

Why Burn the Forest? Ask the Bears

<http://www.citizen-times.com/story/news/local/2014/09/16/forest-service-nc-burn-ask-bears/15713263/>

Shared 600 times on social media

Lenoir News Topic, Cover of Sunday edition

Japanese Weed a Growing Problem at Wilson Creek

<http://www.newstopic.net/x143263231/A-fix-a-problem-a-fight>

Asheville Citizen Times, Cover of Sunday edition

Silver Lining Seen in Linville Gorge Wildfire

<http://www.citizen-times.com/story/local/2014/07/19/silver-lining-seen-linville-gorge-wildfire/12891387/>

High County Press

Historic China Creek Trail Restored in Blowing Rock, Passes Through Pisgah & NPS Land

<http://www.hcpres.com/news/historic-china-creek-trail-restored-in-blowing-rock.html>

Television:

WSOC TV Charlotte

Neighbors Say They Weren't Warned About Prescribed Mountain Burn

<http://www.wsocvt.com/news/news/local/neighbors-say-they-werent-warned-about-prescribed-/nkZJC/>

Despite the sensationalist title (the reporter notes the Forest Service worked to alert residents), this piece highlighted the goals of burns under the CFLR

Social Media:

National Forest Foundation, Conservation Connect

Best Practices for Maintaining an Effective Web Presence

<https://www.nationalforests.org/assets/pdfs/Best-Practice-Maintaining-an-Effective-Web-Presence.pdf>

The Nature Conservancy, Conservation Gateway – Fire Learning Network Notes from the Field

Lake James Prescribed Burn

https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/sbr/Documents/NotesFromTheField_SBR_LakeJamesBurn_2015.pdf

Appalachian Trail Blog

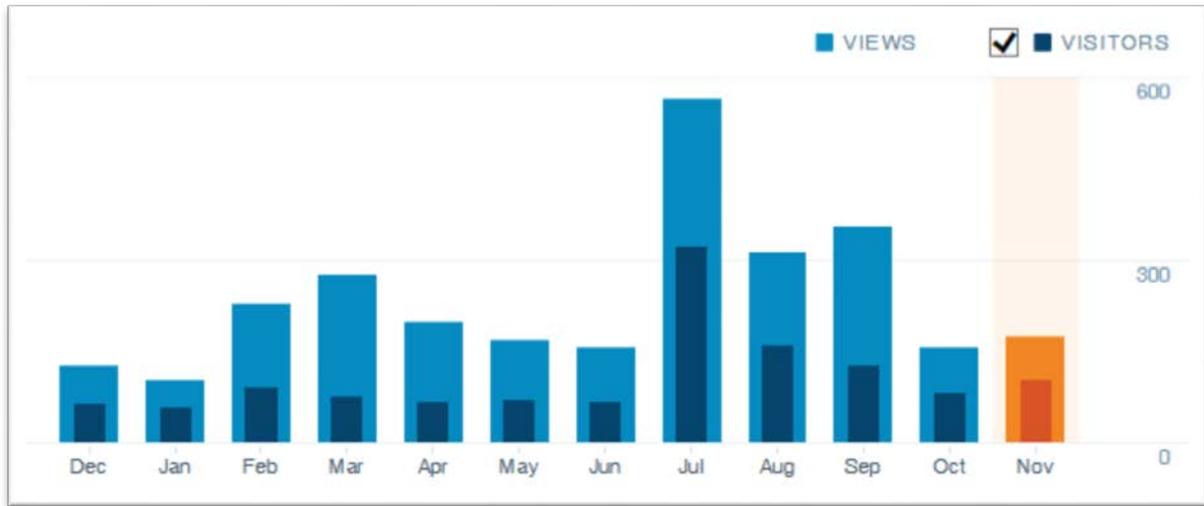
Progress on North Carolina's Grandfather Restoration Project

<http://appalachiantrail.com/20141218/progress-north-carolinas-grandfather-restoration-project/>

Grandfather Restoration Project Blog

www.grandfatherrestorationproject.wordpress.com

The official blog of the Grandfather Restoration Project, run by the collaborative
 FY2015 stats: 17 posts, 2,925 views



Most popular in FY2015 posts include:

- [Fire and Invasives: The Paulownia Problem](#)
- [Partnership for the Wilson Ridge Trail: A Mountain Biker’s Alderaan](#)
- [GUEST POST: SAWS Helps Restore Trails in Linville Gorge](#)
- [Wildlife Monitoring: Turkey, Bobcats, and Bears – Oh My!](#)
- [Wildlife of the Grandfather District: The Ruffed Grouse](#)
- [Saving a Keystone Species: Hemlock Restoration on the Grandfather RD](#)

Multiple news releases through the National Forests in North Carolina and partner organizations:

Example USFS release: *Historic China Creek Trail Restored in Blowing Rock*
<http://www.fs.usda.gov/detail/nfsnc/alerts-notice/?cid=stelprd3855030>

Signatures:

Recommended by (Project Coordinator(s)): _____

Approved by (Forest Supervisor(s))¹²: _____

¹² If your project includes more than one National Forest, please include an additional line for each Forest Supervisor signature.