CFLR Project(Name/Number): CFLR004

National Forest(s): **Arapaho & Roosevelt and Pike & San Isabel National Forests**

Responses to the prompts on this annual report should be typed directly into this template, including narratives and tables:

1. Match and Leverage funds:

a. FY13 Matching Funds

Fund Source – (CFLR Funds Expended[1])	Total Funds Expended in Fiscal Year 2013($)
CFLN	**$2,494,072**

Fund Source – (Carryover funds expended (Carryover to in addition to CFLR/CFLN)[2] (please include a new row for each BLI))	Total Funds Expended in Fiscal Year 2013($)
NFTM	$250,381*
NFVW	$184,500*
NFWF	$146,561*
WFHF	$266,000
Total	**$847,442***

***NFxx job codes were used on one task order instead of CFxx. It was not possible to correct this. Correct totals should be NFTM $335,000, NFVW $369,000, and NFWF $275,334 for a total of $1,239,149.

Fund Source – (FS Matching Funds (please include a new row for each BLI)[3])	Total Funds Expended in Fiscal Year 2013($)
CMLG	$243,024
CMRD	$73,065
CMTL	$10,301
NFTM	$120,262
NFVW	$53,329
RTRT	$356,887
WFHF	$1,166,100
Total	**$2,022,968**

Fund Source – (Funds contributed through agreements[4])	Total Funds Expended in Fiscal Year 2013($)
NFXN – Denver Water-PSICC	$813,150
NFXN – Denver Water-ARP	$607,276
NFXN – Arbor Day Foundation	$92,460
CWFS – Colorado Springs Utilities	$198,016
Total	**$1,710,902**

[1] This amount should match the amount of CFLR/CFLN dollars obligated in the PAS report titled CFLR Job Code Listing and Expenditure Report – Detailed Analysis by Fiscal Year.

[2] This value should reflect the amount of carryover funds allocated to a project as indicated in the program direction, but does not necessarily need to be in the same BLIs as indicated in the program direction. These funds should total the matching funds obligated in the PAS report.

[3] This amount should match the amount of matching funds obligated in the PAS report.

[4] Please document any partner contributions to implementation and monitoring of the CFLR project through an agreement (this should only include funds that weren't already captured through the PAS job code structure for CFLR matching funds). Please list the partner organizations involved in the agreement.

Fund Source – (Partner In-Kind Contributions[5])	Total Funds Expended in Fiscal Year 2013($)
Colorado Forest Restoration Institute	$29,685
Front Range Roundtable Members (CFLR monitoring team and UMC team)	$101,520
Rocky Mountain Tree-Ring Research	$22,500
Total	**$153,705**

Fund Source – (Service work accomplishment through goods-for services funding within a stewardship contract[6])	Total Funds Expended in Fiscal Year 2013($)
Messenger Gulch 2	$5,994
Broken Wheel	$7,593
Crystal Creek	$4,896
Ponderosa	$2,211
Redfeather 2	$6,551
Gold Hill	$575
Lazy Z (partner match)	$4,223
Total	**$32,043**

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

The following table provides information on funds that were used by partners to accomplish hazardous fuels reduction and restoration activities on non-National Forest System lands (private land, State and local government land) within the Colorado Front Range CFLR project area. These treatments are an important component of accomplishing goals of the landscape level changes envisioned with this CFLR project. The funds and treatment acres presented in the table are not the total treatments, but only represent the large efforts where data is available for this annual report.

Organization	Dollars Used	Acres Treated
Coalition for the Upper South Platte	$ 383,000	292
Denver Water	$ 68,750	201
Colorado State Forest Service (Woodland Park Area only)	$1,975,458	2,985
Colorado Springs Utilities	~$4,000,000	~4,000
USDA- NRCS	$2,000,000	~1,400
Waldo Recovery Group (Post Fire Rehabilitation/Restoration)	$27,447,385	See separate table for accomplishments

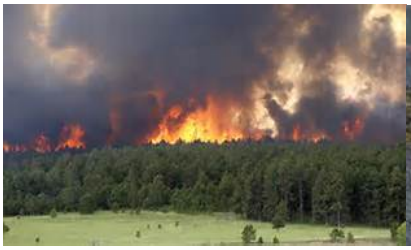
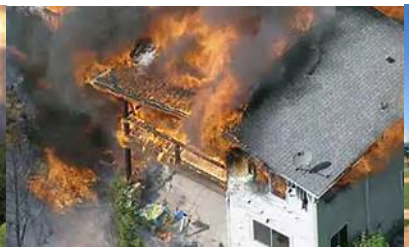
Approved by (ARP Deputy Forest Supervisor): /s/ Ron J. Archuleta 12/6/2013

Approved by (PSICC Forest Supervisor): /s/ Jerri Marr 12/6/2013

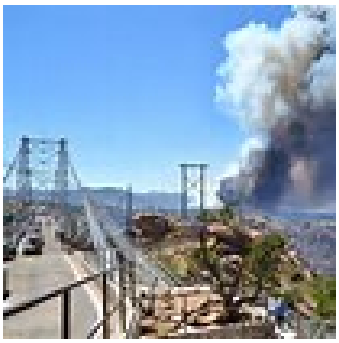
[5] Total partner in-kind contributions for implementation and monitoring of a CFLR project. Please list the partner organizations that provided in-kind contributions. See "Annual Report instructions" for instructions on how to document in-kind contributions.
[6] This should be the amount in the "stewardship credits charged" column at the end of the fiscal year in the TSA report TSA90R-01.

2. **Discuss how the CLFR project contributes to accomplishment of the performance measures in the 10 year Comprehensive Strategy Implementation Plan[7], dated December 2006**. Please comment on the cumulative contributions over the life of the project if appropriate. This may also include a description of the fire year (fire activity that occurred in the project area) as a backdrop to your response (please limit answer to one page).

The Black Forest Fire started June 11, 2013. It burned 14,280 acres. Two people died during and 486 homes were destroyed during the fire. The fire was contained on June 20, 2013. The Black Forest Fire is now the most destructive wildfire in Colorado's history, surpassing the 2012 Waldo Canyon fire, which occurred less than 10 miles to the southwest of the Black Forest Fire. This fire occurred entirely on private land. During the fire, more than 38,000 people were evacuated from their homes. The cost of suppressing was $9,323,955. The total damage to private property is estimated to be over $85 Million.

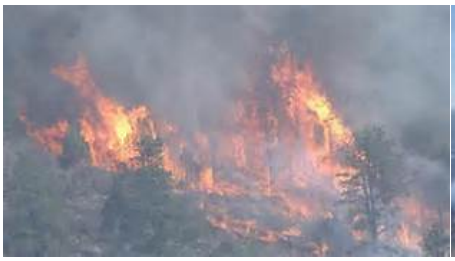




In addition, the Royal Gorge Fire occurred just outside the CFLRP boundary on BLM, private, and Canon City owned land. This fire ignited on June 11, 2013 and was contained on June 16, 2013. This fire burned in pinyon-juniper as well as lower montane forested ecosystems, similar to the CFLRP project area. It consumed 3,218 acres. It burned 2,156 acres of the Royal Gorge Park, owned by the City of Canon City along with 20+ structures and 32 planks on the Royal Gorge Bridge itself. It burned 561 acres of private land and 501 acres of land managed by the BLM. No homes were destroyed and there were no fatalities.




The Lime Gulch Fire started June 18, 2013 and was contained June 23, 2013. It was started by a lightning strike and occurred entirely on National Forest System lands. No future CFLRP projects were impacted by this fire. However, the fire did burn through future hazardous reduction fuels treatments to be funded by Denver Water in 2016/2017. Of note, low severity fire occurred on approximately 84 acres on the Lime Gulch fire and moved those acres towards desired conditions and a more restored forest structure.

[7] The 10-year Comprehensive Strategy was developed in response to the Conference Report for the Fiscal Year 2001, Interior and Related Agencies Appropriations Act (Public Law 106-291).



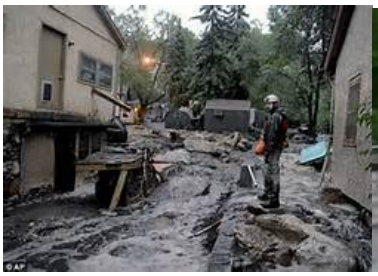
Waldo Wildfire Update

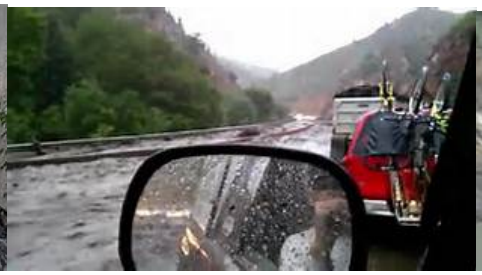
The Waldo wildfire occurred in 2012 and flash floods that occurred during the summer of 2013. On July 1, 2013, more than half inch of rain fell in 20 minutes. In the past, this would have been a normal summer thunderstorm. But following Waldo Canyon Fire, this rain turned into a torrent, resulting in an 8' wall of black debris with boulders and burned trees that flowed through Manitou Springs. The worst flood occurred August 9, when an inch and a half fell quickly. Another large wall of debris came off the Waldo Canyon Fire burn scar. During this flood, one individual was killed along Highway 24. It is uncertain if he was swept away from his car, or tried to escape on foot.

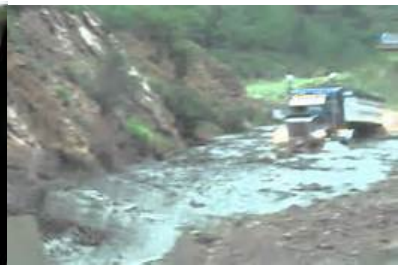
As a result of the flooding,

Two fatalities occurred during the August flooding
More than 160 people were evacuated from low-lying areas
72 homes were damaged, 6 homes were determined uninhabitable
2 apartment buildings were damaged
37 businesses (buildings) were damaged and 2 buildings were determined uninhabitable

Because of the continued flooding threat, Colorado Highway 24, a major east-west state highway was closed multiple times over the course of the summer of 2013.


Flooding along Highway 24 (see Semi Truck from


Same flood event

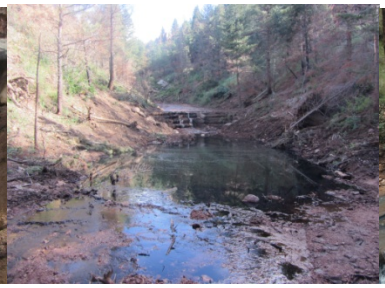

Flooding Damage in Manitou Springs

The Waldo Recovery Group was established in the fall of 2012 to address post fire flooding following the Waldo Canyon Fire during the summer of 2012. This group includes more than 35 partners from Federal, State, and local governments, to local and national non-profits and private landowners. To date, this group has expended more than $30 Million on public and private lands to assess the flooding risks and mitigate the impacts of flooding. Following the assessment, the Waldo Recovery Group established priorities and developed a strategy to implement on the ground treatments.

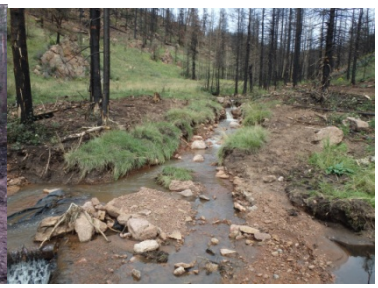
Treatments include restoration and rehabilitation of the burn scar to reduce the sediment loads coming from hillsides and drainages. Treatments include installation of sediment detention basins installed to capture sediment and restore the natural floodplain within the drainage bottom, channel stabilization, reconstructing/rerouting roads and trails, and installing hillslope treatments designed to stop headcuts in side drainages and capture sediment from steep hillsides.

Sub Watershed	Detention Basins (number)	Detention Basins (acres)	Channel Work (feet)	Channel Work (acres)	Channel Length (miles)	Road/Trails (miles)	Road/Trails (acres)	Hillslope Treatments (acres)
FS	41	21	19,760	101	22.27	48	275	82
Private	13	7	12,300	63	Not calc.	0	0	7
Total	54	28	32,060	164	22.27	48	275	89

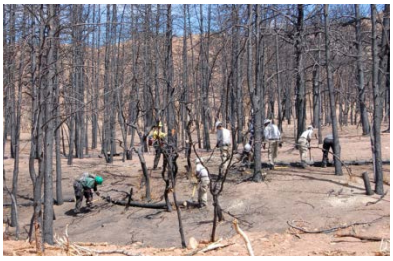
Detention Basin Wellington Gulch Pre-Summer flooding



Post Flooding Waldo Canyon



Channel Stabilization Camp Creek

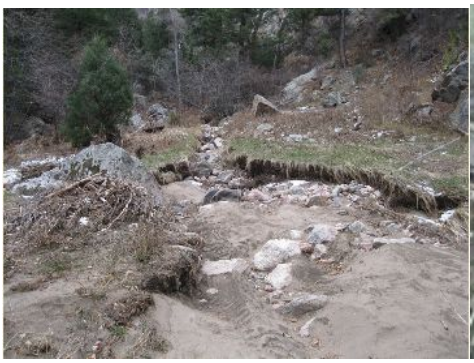


Hillslope Treatments/Seeding

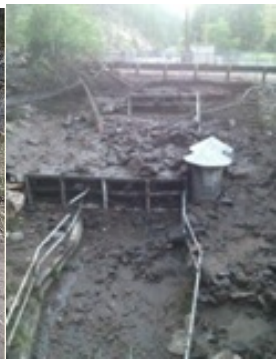
High Park and Hewlett Fires Update

Record-setting drought and historically low snowpack set the stage for the Hewlett and High Park Fires on the Canyon Lakes Ranger District. The High Park Fire was ignited by lightning on private land June 9, 2012, and burned 87,284 acres (over 42,000 of National Forest System lands (NFS)) destroying 264 homes and killing one individual at her residence. The fire was contained June 30. The High Park Fire burned into and around the Hewlett Fire, which burned 7,685 acres in May 2012. Both fires were in the area of the Cache la Poudre River and with both impacting watersheds for the Colorado Front Range.

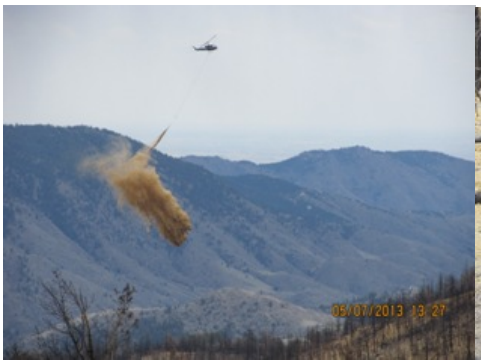
Since the fires, much work has been occurring on both private and public lands. Larimer County, Natural Resource Conservation Service (NRCS), and water providers have been working closely with private landowners to implement much needed restoration work adjacent to NFS lands. Work on NFS land has included almost 6,600 acres of aerial applied mulch, 16 miles of trail stabilization and 8 miles of road stabilization. Hazardous tree removal has also occurred along trails. Noxious weed treatment has begun under a Participating Agreement with Larimer County. Extensive restoration work with partners such as the High Park Restoration Coalition, the City of Greeley, the City of Fort Collins and the Arapaho Roosevelt Pawnee Foundation has occurred within both burn areas. Three trail rehabilitation days were coordinated through volunteer groups. Multiple research projects within the burn areas looking at: Soils (carbon movement, sediment transport)**,** Mulching Effectiveness**,** Water Quality**,** Mountain Pine Beetle Effects, and Vegetation/Fire Effects**.** A Forest Service team is analyzing reforestation opportunities for Ponderosa pine within the High Park Fire burn area, considering reforestation on 130-1,500 acres.



Young's Gulch trail damaged by flooding



Monroe Diversion damaged by flooding



Aerial application of mulch

Agricultural straw on the ground in burned area

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

The expenditure amounts were based upon Forest Service financial records, agreement documents, partner reports and estimates of in kind contribution based upon attendance records. The percentage used on contracts was based upon contract costs. The monitoring percentages were based upon agreements, contracts or workplan amounts. The contract funding distributions was based upon contract records. The volume estimates were based upon contract and cruise estimates. The products distribution was based upon comparison of saw log and biomass estimates in contract

and cruise estimates. The CFLN and total funds expended were increased by $404,077 that were spent on a task order, but not coded to the CFLR project. The total volume was increased by 8,893 ccf to account for matching projects not identified as CFLR in FACTS.

FY 2013 Jobs Created/Maintained (FY13 CFLR/CFLN/ Carryover funding only):

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income[8]
Commercial Forest Product Activities	**62.3**	**95.6**	**$2,209,932**	**$3,646,638**
Other Project Activities	**33.3**	**38.1**	**$ 649,787**	**$ 833,341**
TOTALS:	**95.6**	**133.6**	**$2,859,718**	**$4,479,979**

FY 2013 Jobs Created/Maintained (FY13 CFLR/CFLN/ Carryover and matching funding):

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income[9]
Commercial Forest Product Activities	**154.2**	**236.5**	**$5,470,190**	**$ 9,026,434**
Other Project Activities	**88.1**	**99.4**	**$1,610,529**	**$ 2,049,050**
TOTALS:	**242.2**	**335.9**	**$7,080,719**	**$11,075,484**

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

The following are the findings from the draft social and economic monitoring assessment of the FR-CFLRP for 2012-2013. This project-level assessment identifies the local economic contributions and summarizes the wood utilization associated with the FR-CFLRP. Outreach mechanisms pertaining to forest management and wildfire mitigation and preparedness across the Front Range are identified with recommendations for the FRR to support these efforts.

Economic Contributions

The opportunity to create jobs and support local economies is a high priority for the FR-CFLRP. A detailed analysis of the contract-level economic contributions in calendar year 2012 was carried out to identify the extent these economic goals were met. It should be noted that the economic impact estimates in this analysis contrast with the estimates reported in the FY2011 CFLRP Annual Report due to differences in methodologies and data assumptions.

Seven task orders associated with the FR-CFLRP were initiated in 2012, with five of these task orders fulfilled and two partially completed by the year's end. Five task orders initiated in 2011 were also completed in 2012. The Rocky Mountain Research Station, Rocky Mountain Tree Ring Research, and the Colorado Forest Restoration Institute also received CFLR funding for monitoring and consulting services.

[8] *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.*

[9] *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.*

The economic effects of these restoration activities were identified using Input-Output (I-O) modeling of pertinent operational expenditure and labor information obtained from the contractor. Our analysis estimates the restoration activities contributed approximately $2.6 million in labor income and $1.5 million in GDP to the local economy. These contributions to the local economy were stimulated by the contractors' operation expenditures as well as labor income.

In addition, a total of 61 full- and part-time jobs were calculated. All company employees reside within Colorado and are able to commute to work. The FR-CFLRP contractor subcontracts with other companies to assist with manual forest management operations and to conduct all trucking operations. The contractor was responsible for 59 percent of the total number of hours billed, with all mechanical work being completed by the contractor and a majority of the manual work (98 percent) completed by out-of-state subcontractors based in Florida and Oregon.

Wood Utilization

A total of 4,117 acres were treated under the FR-CFLRP in 2012, with 2,057 acres treated on the Pike and San Isabel National Forests (PSI) and 2,060 acres treated on the Arapaho and Roosevelt National Forests (AR). The majority (81 percent) of the materials removed on the PSI were through mechanical treatments, whereas 89 percent of the treatments on the AR were completed manually. The material harvested manually was not available for value-added uses, whereas 99 percent of the materials in the mechanized units were.

Thirteen businesses purchased the available value-added materials from the FR-CFLRP treatments in 2012. The purchasers included ten Colorado businesses, either in the same county or a county near where the work was being done, and three out-of-state businesses that are located in Wyoming, New Mexico, and Washington. A large portion of the biomass from both forests went to wood chips used for post-fire rehabilitation efforts. The value-added materials included sawtimber, small diameter timber, firewood, paper pulp, and bark fines. Materials from the PSI were turned into an assortment of products with the largest portion (54 percent) going to bark fines for landscaping and four percent going to high-value dimensional lumber. The majority of materials (55 percent) from the AR went to paper pulp, followed by sawtimber and small diameter wood products (9% each).

Public Outreach

We began to identify effective public outreach mechanisms for the Front Range, in addition to recommendations for the Front Range Roundtable to support such outreach efforts by holding four focus group meetings with forest management public outreach experts from across the Front Range. The participants identified a number of effective outreach approaches. In summary, participants emphasized the importance of using messages tailored to the local community and the effectiveness of tying into existing community organizations to distribute information to the public. They also identified one-on-one outreach and interactive methods as effective approaches and that using positive messages to explain what forest management will look like is much more effective way to get through to people.

The focus groups identified four primary recommendations for the Front Range Roundtable to support outreach efforts across Front Range communities:

1. Support and organize opportunities for outreach experts and organizations to meet.
2. Lobby for, support and/or organize statewide outreach campaigns.

3. Organize and support resource sharing for communities and outreach specialists.
4. Promote consistent messages across state and local groups.

Collaboration

Collaboration is a key component of the Front Range Roundtable. A baseline measure of collaboration was established through key informant interviews conducted by the Colorado Forest Restoration Institute in the 2011 monitoring report. Additional interviews with key informants will be conducted every 3-5 years to track the challenges, achievements, and lessons learned associated with the FR-CFLRP collaborative process.

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

A subgroup of Front Range Roundtable (FRR), the Monitoring Working Group (MWG) was tasked with the creation of a CFLRP monitoring plan. The Monitoring Plan was successfully developed by June 2011. The CFLRP Monitoring Plan is the result of intense multiple stakeholder learning and deliberations by the Front Range Roundtable Monitoring Working Group. The multiple stakeholder group consisted of members of both the Pike and San Isabel and Arapaho and Roosevelt National Forests, USFS Region 2, Colorado State Forest Service, US Fish and Wildlife Service, Colorado Department of Wildlife, Natural Resource Conservation Service, The Nature Conservancy, The Wilderness Society, Colorado Wild, Rocky Mountain Research Station, University of Colorado, Colorado Forest Restoration Institute, Tree Ring Laboratory, Boulder County and the City of Boulder, and many other stakeholders.

Ecological Monitoring Program

The monitoring plan outlines a comprehensive ecological monitoring program to assess success of CFLRP treatments for a minimum of 15 years after project implementation, and to guide future treatments through an adaptive management framework. Monitoring results will be used both to evaluate the rate and extent of achievement of individual project goals, and to incorporate data into analyses of cumulative effects at the landscape level. The monitoring protocols are designed to address specific Desired Conditions. Desired Conditions are expressed in broad, general terms, and have no specific date by which they are to be achieved. The group established Desired Ecological Conditions, based on the original CFLRP proposal, and which determined the group's choice of variables to measure and protocols to use. They are: establish a complex mosaic of forest density, size and age (at stand scales); establish a more favorable species composition favoring ponderosa pine over other conifers; establish a more characteristic fire regime; increase coverage of native understory plant communities; increase the occurrence of wildlife species that would be expected in a restored lower montane forest; establish a complex mosaic of forest density, size and age (at landscape scale).

The plan outlines a series of specific measurements that will be done in individual plots, largely based on existing Common Stand Exam (CSE) protocols that are part of standard inventory procedures. However, during the collaborative process to get to this point, we identified several gaps in trying to translate individual plot data to the landscape scale. For example, our first Desired Condition is to “establish a complex mosaic of forest density, size, and age”. The monitoring working group felt strongly that this Desired Condition should include some sort of spatial metric to define and assess that mosaic condition beyond simple averages and distributions of the identified monitoring variables as measured in the plots. However, we were not able at this time to come up with such a metric, nor how to measure it as part of the monitoring program. Some of these gaps may be overcome depending on funding available to implement the monitoring program.

The third year of collecting monitoring data was completed in 2013. This year included both pre- and post-treatment monitoring data. During the winter of 2012-2013 data was be analyzed to determine if treatments are moving target areas toward desired conditions.

For both the Pike and San Isabel and Arapaho and Roosevelt National Forests, there were decreases in basal areas and trees per acre associated with restoration treatments across projects, consistent with desired trends expressed in the FR-CFLRP's monitoring plan. Tree removals were concentrated in smaller-diameter size classes on both forests, resulting in higher quadratic mean diameters and a more balanced size class distribution following treatment. Species composition generally showed a shift toward ponderosa pine over other conifers, although Douglas-fir increased in percent composition on the AR. This trend should be evaluated further for the AR to determine if more Douglas-fir is being retained than is desirable, especially given the regeneration capabilities of this species and its potential for capturing sites following treatments.

The CSE data could not be used to determine trends in tree age class distributions pre- and post-treatment as tree ages are not included in the data set. Large tree retention is generally practiced on both forests, however, and likely captures most of the old trees present prior to treatment. Whether or not more explicit information for tree age class distributions pre- and post-treatment is desired should be discussed by the FR-CFLRP. The CSE protocol is also not designed to adequately assess stand- or landscape-scale spatial heterogeneity. Other methods are being explored by the FR-CFLRP for this assessment.

An adaptive management tool has been developed and is being documented to facilitate changes if desired trends are not being achieved. Now that monitoring results are available the group will focus in 2014 on implementing the adaptive management tool.

Also a subgroup of the monitoring team has begun developing wildlife monitoring protocols. The group worked through-out 2013 to refine species list to identify key species and develop monitoring protocols to measure if expected outcomes are occurring. The group will complete their work in early 2014 with data collection to begin in the summer of 2014.

Social and Economic Monitoring Program

In 2013 personnel with the CFRI and USDA, Forest Service gathered data from 2012 on the Economic impact of the Colorado Front Range CFLR project as part of an agreement with the Forest Service. A draft report has been prepared and data from that report are the basis for information presented in Item 4.

Upper Monument Creek:

To support CFLRP implementation into the future, an additional project area, Upper Monument Creek was identified and initial planning conversations took place in Fiscal Year 2012. The Nature Conservancy has convened the Upper Monument Creek collaborative group. Over the course of the winter of 2012 through the fall of 2013, a subset of the MWG worked collaboratively to outline the Upper Monument project area, identify treatment types and locations, define Desired Conditions for the vegetation types encountered with in the project area, recommend design criteria, and provide other management recommendations. The final report from the collaborative is forthcoming. The information provided by the subgroup will be used as a starting point for the Forest and Ranger District to initiate NEPA. This group intends to continue to provide input to the Forest/Ranger District throughout the NEPA process and as project implementation occurs. The information determined through the collaborative process will help inform desired conditions throughout the rest of the CLFPR project.

Future Steps

Collection of data will continue in the summer of 2014 with the collection of Tier 1 information from CSE plots by the Forest Service and by collection of Tier 2 may be revised with additional data collected related to wildlife.

Landscape-scale assessment of whether restoration objectives are being met is an important question to the group. Various options to monitor at a landscape scale will be evaluated to determine a desired course of action.

The Plan is rooted in a consensus regarding the need to use adaptive management as a tool to reduce uncertainty over time through a structured, iterative process. Through adaptive management, the ensuing data will allow the FRR and the USFS to reduce uncertainty using the monitoring information.

integration with other monitoring efforts addressing Tier 2 variables such as that being conducted under the Southern Rockies Landscape Conservation Cooperative.

While monitoring data are presented here in the context of desired conditions, there is a need to better define how the collaborative collectively determines whether progress toward desired conditions is being achieved.

Establishing a template or standard reporting method should also be considered by the FR-CFLRP. Determining how best to present the data so that it is interpretable by a wide audience is important.

6. **FY 2013 accomplishments**

Performance Measure	Unit of measure	Total Units Accomplished (10)	Total Treatment Cost ($)	Type of Funds (CFLR, Specific FS BLI, Partner Match)[10]
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres			
Acres of forest vegetation established FOR-VEG-EST	Acres	1,564	$356,887	RTRT
			$92,460	NFXN – Arbor Day Foundation
Acres of forest vegetation improved FOR-VEG-IMP	Acres	5,758	$1,884,876	CFLN
			$607,276	NFXN- Denver Water
			$198,016	CWFS – Colorado Springs Utilities
			$57,047	NFVW
			$191,352	WFHF
			$131,561	NFWF
				See FP-FUELS-WUI
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	429.2	$87,003	NFVW
			$17,000	WFHF
			$7,000	CFLN
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands	Acres			

[10] 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 [10]	Total Treatment Cost ($)	Type of Funds (CFLR, Specific FS BLI, Partner Match)[10]
INVSPE-TERR-FED-AC				
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres	3,003	$243,024	CMLG See FOR-VEG-IMP
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres			
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles			
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres	1,414		See FOR-VEG-IMP
Acres of rangeland vegetation improved RG-VEG-IMP	Acres			
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles	7.8	$73,065	CMRD
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles			
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	7.8		See RD-HC-MAIN
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number			
Miles of system trail maintained to standard TL-MAINT-STD	Miles	9.2	$10,301	CMTL
Miles of system trail improved to standard TL-IMP-STD	Miles			
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles			
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres	256		See TMBR-VOL-SLD

Performance Measure	Unit of measure	Total Units Accomplished (10)	Total Treatment Cost ($)	Type of Funds (CFLR, Specific FS BLI, Partner Match)[10]
Volume of Timber Harvested TMBR-VOL-HVST	CCF	10,939.2		See TMBR-VOL-SLD
Volume of timber sold TMBR-VOL-SLD	CCF	6,174.9	$310,500	NFTM
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production BIO-NRG	Green tons	260		See FOR-VEG-IMP
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire FP-FUELS-NON-WUI	Acre			
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	9,625.3	$813,150	NFXN – Denver Water
			$1,213,748	WFHF
			$78,779	NFVW
			$587,196	CFLN
				See FOR-VEG-IMP
Number of priority acres treated annually for invasive species on Federal lands SP-INVSPE-FED-AC	Acres			
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres			

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

2013 was a very successful year for the Colorado Front Range CFLR project. Use of the Front Range Long-term Stewardship contract as a primary means of accomplishing CFLR projects continued. Task orders focused on restoration of the lower montane ecosystem, hazardous fuels reduction and forest health improvement on over 6,725 acres. These treatments are consistent with the goals of the Colorado Front Range CFLR project. Progress to date has been what was anticipated in the project proposal. The areas treated were completed in conjunction with the Woodland Park Healthy Forest Initiative, and in central Boulder County and northern Larimer County near the community of Redfeather Lakes. All treatments are located in the Wildland Urban Interface.

Treatments accomplished in 2013 as part of (or matching to) the Colorado Front Range CFLR also significant matching accomplishments completed through partnerships including 1,400 acres of reforestation an additional 2,900 acres of forest restoration/hazardous fuels reduction treatments funded by partners in the CFLR project area.

The combined contribution of partnership funds in FY13 to fund treatments on NFS lands is almost $1.9 million. Partners provided approximately 48 percent of the total project matching funds. In 2013, over 260 tons of biomass and almost 6,200 CCF were produced through the CFLR project. An estimated 135 part-time and fulltime jobs are directly related to 2013 CFLR project activities and another 200 jobs are indirectly related.

The Front Range CFLRP monitoring group has identified increasing heterogeneity at various scales as a key restoration goal. One of the silvicultural practices that has been proposed to meet this goal is the retention of clumps of trees, ranging from 2 to 20 trees per clump, with interlocking crowns as much as is practical. In order to efficiently meet this goal both forests are experimenting with various implementation methods.

In FY13 managers on the Pike National Forest utilized leave tree marking on two projects to demonstrate desired results to equipment operators. For the Long John project two 16 acre demonstration areas were designated by FS personnel and members of the CFLRP monitoring group. Each sample area was located in a different forest type, one in a ponderosa pine dominated stand and one in a dry mixed conifer stand. Small leave clumps, ranging from 2-10 trees per clump were retained. Although pre-treatment stand conditions were not highly variable, the marking approach was considered effective in increasing post treatment heterogeneity.

Pre-treatment photo comparison, sample mark area, Long John project, Pike National Forest.

Post-treatment photo comparison, sample mark area, Long John project, Pike National Forest.

All mechanized treatment units (for the Messenger Gulch 2 project were leave tree marked. This project had a high pre-treatment level of variable tree spacing. For this project the retention of clumps with up to 20 stems per clump with interlocking crowns was possible. Individual trees were retained between clumps and small openings were created.

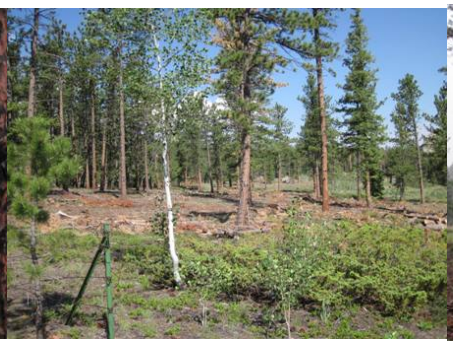
Individual tree retention, interspacing openings Messenger Gulch 2 project, Pike National Forest.

Clump retention, Messenger Gulch 2 project, Pike national Forest.

These projects are the best on the ground example of variable tree spacing on the Pike National Forest to date. Ultimately Forest Service managers and members of the CFLRP monitoring group hope to create several demonstration areas through leave tree marking that will facilitate clear communication of silvicultural prescriptions to equipment operators. This may increase the efficiency of future restoration projects should the Forest Service be able to increase post treatment heterogeneity with limited tree marking.

Arapaho and Roosevelt personnel have tried several different approaches to obtain a "clumpy" condition in treated stands utilizing description by prescription techniques. The problems have been that these can get quite complicated and increases efforts by sale administrators and contractors. A monitoring trip with the CFLR monitoring team occurred in July 2013 and resulted in some suggestions for refining this technique. The following pictures are of post-treatment stands.

Clump in left center



Untreated to left; clump to left

Several clumps with varying number of trees

Adaptive Management

Restoration goals, measurable objectives, and adaptive management protocol are currently being refined on the Pike National Forest through the Upper Monument Creek Restoration Initiative Project (UMCRI). For this project a collaborative working group, hosted by the Nature Conservancy, is engaging a broad range of stakeholders to develop science based forest restoration and management recommendations for a 67,000 acre project area west of Colorado Springs, CO. Participants include Forest Service managers and representatives from a local water provider,

the forest products industry, state forestry and wildlife professionals, the Wilderness Society, the Colorado Forest Restoration Initiative, and the Coalition for the Upper South Platte. Many of these participants are also members of the CFLRP monitoring group. This project is intended to restore and maintain forest structures across land ownerships through the strategic placement of treatments that reduce the risk of uncharacteristically large, severe fires, result in increased community and watershed protection. These treatments would also create forest conditions that are resilient in the face of anticipated climate changes.

A major focus of the UMCRI collaborative group has been to develop a framework for stakeholder engagement, learning, and adaptive management throughout the life of the project. This framework would achieve objectives such as informing and cultivating social acceptance for forest management, ongoing education and outreach, and the incorporation of science as a basis for defining restoration reference conditions, prescription development, and project design. Key recommendations for an adaptive management framework include:

- Analyzing the full range of treatment options that will provide the flexibility for revisions to silvicultural practices and implementation methods based on monitoring results, new science and technology, and new collaborative agreements and partnership.
- A conservative approach with initial treatments to allow for monitoring and collaboration to assess treatments as soon as possible in the life of the project.
- The identification of trigger points that will guide management decisions and also identify when new environmental analysis may be necessary.

The collaborative group hopes that the development and implementation of an adaptive management framework will also result in increased efficiencies during the NEPA process and project implementation whiling moving the landscape towards desired conditions.

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?[11]

Fiscal Year	**Total number of acres treated (treatment footprint)[1]**
FY13	2,978
FY10, FY11, FY12 and FY13 (as applicable- projects selected in FY2012 may will not have data for FY10 and FY11; projects that were HPRP projects in FY12, please include one number for FY12 and one number for FY13 (same as above))	11,331

[1]CFLR funded acres only to track progress toward proposal goal of 1,000 acres Year 1 and 3,400 acres Years 2-10. Year 4 expected total is 11,200 acres if project had been fully funded every year.

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

There was only one large fire that occurred within the CFLRP boundary, Lime Gulch. In addition, two large fires, Black Forest and Royal Gorge fires occurred close the CFLRP boundary. Both of these fires burned in similar

[11] 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.

vegetation types as occur within the CFLRP boundary. Impacts from these fires are similar to those seen from Waldo Canyon, High Park and Hayman Fires.

Since the selection of the Colorado Front Range CFLR proposal, the following significant wildfires have burned within the project boundary:

Year	Month	Fire Name	Cause	Size (Acres)	Homes Destroyed	Civilian Fatalities
2010	September	Fourmile Canyon	Human	6,181	168	0
2010	September	Reservoir Road	Human	754	2	0
2012	March	Lower North Fork	Human	4,140	23	3
2012	May	Hewlett	Human	7,685	0	0
2012	June	High Park	Lighting	87,284	259	1
2012	June	Springer	Human	1,100	0	0
2012	June	Woodland Heights	Power Lines	27	22	0
2012	June	Waldo Canyon	Human	15,364	346	2
2013	June	Black Forest*	Human	14,280	486	2
2013	June	Royal Gorge*	Unconfirmed	3,216	0	0
GRAND TOTAL				**140,031**	**1,306**	**8**

*adjacent to CFLR project area

Both the Pike and San Isabel National Forests and Arapaho and Roosevelt National Forests maintain robust fire preparedness organizations. In FY2012, the two Forests expended approximately $2,450,000 in WFPR funds within the boundaries of the Colorado Front Range CFLR project area to be prepared to respond to wildfire ignitions.

During 2012 there were 98 fires totaling 585 acres, the largest of which was the Lime Gulch fire (511 acres). Sixteen fires escaped initial attack within the CFLRP boundary over the course of FY13, with twelve of them burning 2 acres or less.

10. **Describe any reasons that the FY 2013 annual report does not reflect your project proposal, previously reported planned accomplishments, or work plan.** Did you face any unexpected challenges this year that caused you to change what was outlined in your proposal? (please limit answer to two pages)

The FY 2013 annual report does generally reflect the project proposal. The major differences are that we were able to accomplish more acres than projected due to lower average contract costs and increased partner matching contributions. The lower cost was a result of less costly treatments being implemented this year rather than a reduction in treatment costs. The continued partner matching contributions were significant in FY13. This work is anticipated to continue into the future, but to a much smaller extent as future funding is uncertain. Meeting the overall matching requirements may be a challenge as we get into future years and partnership contributions reduce.

Currently, we are counting several projects and activities as matching that were not anticipated in the original Colorado Front Range CFLR proposal. Waldo Restoration occurred on a large scale in FY13. This project is in partnership with the Waldo Recovery Group, a large body of federal, state, and local governments, and national/local non-profits and landowners. This partnership came into existence following the Waldo Canyon Fire and did not exist when the original CFLR proposal was developed. This project is mitigating post fire flooding and

has restored more than 550 acres of severely burned land on public and private land within the Waldo Canyon burn scar.

A major challenge this year continued to be uncertainty regarding final funding level and the late arrival of CFLRP funds. The uncertainty regarding final funding level made it difficult to establish contract and monitoring funding which created inefficiency in project implementation. The late arrival of funds caused timing problems with award of contracts and with execution of agreements. It also presented difficulties in preparation of FY 2014 projects.

11. **Planned FY 2015 Accomplishments**

Performance Measure Code[12]	Unit of measure	Planned Accomplishment	Amount ($)
Acres treated annually to sustain or restore watershed function and resilience WTRSHD-RSTR-ANN	Acres		
Acres of forest vegetation established FOR-VEG-EST	Acres	1,000	$ 500,000
Acres of forest vegetation improved FOR-VEG-IMP	Acres	2,200	$3,200,000
Manage noxious weeds and invasive plants INVPLT-NXWD-FED-AC	Acre	1,500	$ 300,000
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands INVSPE-TERR-FED-AC	Acres		
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions. S&W-RSRC-IMP	Acres		
Acres of lake habitat restored or enhanced HBT-ENH-LAK	Acres		
Miles of stream habitat restored or enhanced HBT-ENH-STRM	Miles		
Acres of terrestrial habitat restored or enhanced HBT-ENH-TERR	Acres		
Acres of rangeland vegetation improved RG-VEG-IMP	Acres		
Miles of high clearance system roads receiving maintenance RD-HC-MAIN	Miles		

[12] Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2015 is available. Use actual planned funding if quantity is less than specified in CFLRP project work plan, and justify deviation from project work plan in question 13 of this template.

Performance Measure Code[12]	Unit of measure	Planned Accomplishment	Amount ($)
Miles of passenger car system roads receiving maintenance RD-PC-MAINT	Miles		
Miles of road decommissioned RD-DECOM	Miles		
Miles of passenger car system roads improved RD-PC-IMP	Miles		
Miles of high clearance system road improved RD-HC-IMP	Miles		
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage STRM-CROS-MTG-STD	Number		
Miles of system trail maintained to standard TL-MAINT-STD	Miles		
Miles of system trail improved to standard TL-IMP-STD	Miles		
Miles of property line marked/maintained to standard LND-BL-MRK-MAINT	Miles		
Acres of forestlands treated using timber sales TMBR-SALES-TRT-AC	Acres		
Volume of Timber Harvested TMBR-VOL-HVST	CCF		
Volume of timber sold TMBR-VOL-SLD	CCF	5,000	Integrated forest vegetation improved and hazardous fuels reduction
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		
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire FP-FUELS-WUI	Acres	3,400	$4,000,000 (does not include integrated acres)

Performance Measure Code[12]	Unit of measure	Planned Accomplishment	Amount ($)
Number of priority acres treated annually for invasive species on Federal lands SP-INVSPE-FED-AC	Acres		
Number of priority acres treated annually for native pests on Federal lands SP-NATIVE-FED-AC	Acres		

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

The planned FY 2015 accomplishments are based upon full proposal funding. FY 2015 accomplishment will continue to emphasize restoration treatments in the ponderosa pine ecosystem and hazardous fuels reduction in WUI. However, it will continue to be possible to accomplish a small amount of noxious weed treatmen within the CFLR project.

13. **Describe and provide narrative justification if planned FY 2014/15 accomplishments and/or funding differs from CFLRP project work plan** (no more than 1 page):

The FY 2014/15 estimated accomplishments generally do not differ from the project proposal. The accomplishments include noxious weed treatment, watershed improvement and wildlife habitat improvement that were addressed but not specified in the proposal.

As stated in previous annual reports, it is likely that partner contributions to matching funds are not sustainable over the long term. This may result in challenges in the future.