CFLR Project: Four Forest Restoration Project

National Forest(s): Apache-Sitgreaves, Coconino, Kaibab and Tonto

Responses to the prompts on this annual report should be typed directly into this template:

1. Designation of matching funds. Due to the fact that the system for recording matching funds in FFIS was new last year and not all matching funds were coded properly, we are asking for a re-tallying of FY 2010 matching funds in addition to FY 2011 matching funds. Since these numbers will be used as the matching funds totals for FY 2010 and FY 2011 going forward, there is a signature block for the Forest Supervisor (or Forest Supervisors if the project spans more than one national forest).

FY 2010 Matching Funds Documentation

Fund Source	Total Funds Expended in Fiscal Year 2010(\$)
CFLR Funds Expended (this is different than the amount allocated) ¹	\$985,943
FS Matching BLI (please include a new row for each BLI)	
NFTM	\$2,548,000
NFVW	\$887,000
NFWF	\$60,000
NFN3	\$416,000
WFHF	\$3,451,000
WFW3	\$221,000
CMRD	\$4,000,000
CMII	\$4,000,000
CMTL	\$309,000
CMLG	\$2,100,000
НТАР	\$2,100,000
SSSS	
CWKV	\$99,000
CWK2	\$111,000
BDBD	\$30,000 \$6,000
RTRT	. ,
SPS4	\$488,000
SPFH	\$253,000
ARRA	\$315,000
SRS2	\$8,998,000
	\$851,000
Funds contributed through agreements ²	
Partner In-Kind Contributions ³	\$444,360
Service work accomplishment through goods-for services funding	\$245,100
within a stewardship contract ⁴	727J,100

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 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.

³ 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.

This should be the amount in the "stewardship credits charged" column at the end of the fiscal year in the TSA report TSA90R-01.

FY 2011 Matching Funds Documentation

Fund Source	Total Funds Expended in Fiscal Year 2011(\$)	
CFLR Funds Expended ¹	\$1,377,483	
CMLG	\$253,739	
CMRD	\$696,676	
CMTL	\$139,000	
CWFS	\$985	
NFN3	\$736,923	
NFTM	\$624,934	
NFVW	\$178,608	
NFWF	\$29,967	
RTRT	\$117,888	
SPS4	\$110,838	
SRS2	\$276,470	
ssss	\$55,595	
WFHF	\$3,018,636	
WFW3	\$16,950	
	TOTAL \$6,257,207	
Funds contributed through agreements ²		
Partner In-Kind Contributions ³	\$120,480	
	Grand Canyon Trust, Ecological Research Institute, Nature Conservancy, Center for Biological Diversity, Motek Consulting, NAU Lab of Landscape Ecology and Conservation Biology and Rocky Mountain Elk Foundation.	
Service work accomplishment through goods-for services funding within a stewardship contract ⁴	\$360,752	

Approved by :/s/ Jim Zornes	Approved by :/s/ M. Earl Stewart
Apache-Sitgreaves Forest Supervisor	Coconino Forest Supervisor
Approved by :/s/ Mile R Williams	Approved by :/s/ Gene Blankenbaker
Kaibab Forest Supervisor	Tonto Forest Supervisor

2. Discuss how the CLFR project contributes to accomplishment of the performance measures in the 10 year Comprehensive Strategy Implementation Plan⁵, dated December 2006 (please limit answer to one page).

The 4FRI project has not begun large scale implementation at this time. The Mineral C Thompson and Mineral C Whiting Integrated Resource Service contracts are the first projects to be implemented. These projects address the 10-year strategy, as demonstrated by these accomplishments:

- Treatments are governed by the goal of reducing fire intensities that conform to the National Fire Management Plan by reducing hazardous fuels.
- Treatments are also designed to restore fire-adapted ecosystems.

In addition to the Mineral C Thompson and Whiting Sales, additional treatments occurred in Fiscal Year 2011 within the 4FRI area that address the 10-year strategy and include the following:

- Fuels reduction treatments through prescribe burning, management of unplanned ignitions for resource benefits, and mechanical thinning on approximately 63,000 acres, of which approximately 25% of the acres treated are within a Wildland-Urban Interface area.
- Mechanical timber sales occurred on 6,502 acres, reducing fuel loadings and moving these acres towards reference conditions.
- Treatments have been designed by the goal of reducing fire intensities that conform to the National Fire Management Plan by reducing hazardous fuels.
- Thirteen unplanned natural ignitions, burned 37,444 acres, moving the burned area towards the reference condition and restoring fire-adapted ecosystems.
- The Apache-Sitgreaves National Forest has identified major rehabilitation work needed in the Wallow Fire footprint for rehabilitation on National Forest System lands, and the Coconino National Forest began rehabilitation efforts on the Schultz Fire on National Forest System lands that burned in 2010.

⁵ 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).

3. FY 2011 Jobs Created/Maintained (FY 2011 CFLR/CFLN funding only):

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income ⁶
Commercial Forest Product Activities	-	-	\$0	\$0
Other Project Activities	-	-	\$0	\$0
TOTALS:	-	-	\$0	\$0

Detailed Average Annual Impacts Table (From CFLR/N Fund Contributions Only)

	Employm	ent (# Part and Fu	II-time Jobs)		Labor Inc (2010 \$)		
	Direct	Indirect and Induced	Total	Direct	Indirect and Induced	Total	
Thinning-Biomass: Commercial Forest Products							
Logging	-	-	-	-	-	-	
Sawmills	-	-	-	-	-	-	
Plywood and Veneer Softwood	-	-	-	-	-	-	
Plywood and Veneer Hardwood	-	-	-	-	-	-	
Oriented Strand Board (OSB)	-	-	-	-	-	-	
Mills Processing Roundwood Pulp Wood	-	-	-	-	-	-	
Other Timber Products	-	-	-	-	-	-	
Facilities Processing Residue From Sawmills	-	-	-	-	-	-	
Facilities Processing Residue From Plywood/Veneer	-	-	-	-	-	-	
BiomassCogen	-	-	-	-	-	-	
Total Commercial Forest Products	-	-	-	-	-	-	
Other Project Activities							
Facilities, Watershed, Roads and Trails	0.0	0.0	0.0	0.0	0.0	0.0	
Abandoned Mine Lands	0.0	0.0	0.0	0.0	0.0	0.0	
Ecosystem Restoration, Hazardous Fuels, and Forest Health	0.0	0.0	0.0	0.0	0.0	0.0	
Commercial Firewood	0.0	0.0	0.0	0.0	0.0	0.0	
Contracted Monitoring	0.0	0.0	0.0	0.0	0.0	0.0	
Total Other Project Activitie	-	-	-	-	-	-	
FS Implementation and Monitoring	20.6	4.9	25.5	837,781	178,313	1,016,09	
Total Other Project Activities & Monitoring	20.6	4.9	25.5	\$837,781	\$178,313	\$1,016,09	
Total All Impacts	20.6	4.9	25.5	\$837,781	\$178,313	\$1,016,09	

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.

FY 2011 Jobs Created/Maintained (FY 2011 CFLR/CFLN and matching funding):

Type of projects	Direct part and full-time jobs	Total part and full- time jobs	Direct Labor Income	Total Labor Income ⁷
Commercial Forest Product Activities	1,562.8	2,218.0	\$54,109,039	\$77,308,041
Other Project Activities	5.8	6.7	\$194,667	\$227,706
TOTALS:	1,568.6	2,224.7	\$54,303,706	\$77,535,747

Detailed Average Annual Impacts Table (From All Funds)

	Employn	nent (# Part and	Full-time Jobs)	L	abor Inc (2010 \$	5)
	Direct	Indirect and Induced	Total	Direct	Indirect and Induced	Total
Thinning-Biomass: Commercial Forest Products						
Logging	298.0	125.3	423.4	6,462,302	5,074,299	11,536,601
Sawmills	-	-	-	-	-	•
Plywood and Veneer Softwood	-	-	-	-	-	-
Plywood and Veneer Hardwood	-	-	-	-	-	-
Oriented Strand Board (OSB)	-	-	-	-	-	-
Mills Processing Roundwood Pulp Wood	-	-	-	-	-	-
Other Timber Products	1,246.3	522.5	1,768.8	47,293,475	17,941,133	65,234,608
Facilities Processing Residue From Sawmills	-	-	-	-	-	-
Facilities Processing Residue From Plywood/Veneer	-	-	-	-	-	-
BiomassCogen	18.4	7.4	25.8	353,263	183,569	536,832
Total Commercial Forest Products	1,562.8	655.2	2,218.0	54,109,039	23,199,002	77,308,041
Other Project Activities						
Facilities, Watershed, Roads and Trails	0.0	0.0	0.0	0.0	0.0	0.0
Abandoned Mine Lands	0.0	0.0	0.0	0.0	0.0	0.0
Ecosystem Restoration, Hazardous Fuels, and Forest Health	5.8	0.9	6.7	194,666.9	33,039.4	227,706.3
Commercial Firewood	0.0	0.0	0.0	0.0	0.0	0.0
Contracted Monitoring	0.0	0.0	0.0	0.0	0.0	0.0
Total Other Project Activitie	5.8	0.9	6.7	194,667	33,039	227,706
FS Implementation and Monitoring	163.6	21.9	185.5	3,723,769	792,567	4,516,336
Total Other Project Activities & Monitoring	169.4	22.9	192.2	\$3,918,436	\$825,606	\$4,744,042
Total All Impacts	1,732.2	678.1	2,410.2	\$58,027,475	\$24,024,609	\$82,052,084

⁷ 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 (Please limit answer to two pages).

The Four Forest Restoration Initiative (4FRI) achieved a number of community benefits over the last year. The White Mountain Stewardship project that is within the 4FRI project area continues to provide employment opportunities in and around the Eager, Springerville, Snowflake, Show Low and Heber communities in the Eastern half of the 4FRI area. The award of the 300,000 acre 4FRI Stewardship Contract in the fall of 2011 is expected to spread those benefits across the western half of the 4FRI area. In addition to job creation, the total acres of treatment have reduced the risk of stand replacing fire on over 100,000 acres within the last two years.

The 4FRI project also has provided numerous public education/outreach opportunities through 1) presenting a seminar on 4FRI to the Northern Arizona University Semester B Forestry Class, 2) presenting 4FRI to Coconino Community College Forestry class; 3) presenting a hand-on presentation of forest restoration at the Flagstaff Festival of Science (reaching approximately 1,000 people); 4) participation by 4FRI Fire Ecologist Mary Lata and 4FRIStakeholders Dr. Wally Covington of NAU and Paul Summerfeldt of the Flagstaff Fire Department on National Public Radio nationally syndicated Science Friday; 5) participation by 4FRI Team Leader Henry Provencio, and 4FRI stakeholders Dr. Wally Covington of NAU and Taylor McKinnon of the Center for Bi9ological Diversity in a public roundtable on forest restoration on KAET Channel 8 in Phoenix (which broadcast throughout the state of Arizona); 6) presentations on 4FRI by 4FRI team member and stakeholders to the City Councils of Sedona, Camp Verde, and Tusayan, , 7) three interviews on local public radio station KNAU concerning 4FRI, and 8) Participation in two of Coconino County Board of Supervisor's Mandy Metzger morning coffees by 4FRI team members and stakeholders. Additional outreach is provided through 2 websites www.4fri.org, the website of the 4FRI stakeholders group, as well as the Forest Service 4FRI Web Site www.fs.usda.gov/4fri. The stakeholder website contains links to major articles and TV interviews that occurred in Fiscal Year 2011 at http://4fri.org/news.html and the Forest Service website also has a link to major articles at 4FRI Newsroom. The 4FRI stakeholders group also produces a quarterly newsletter that highlights outreach efforts, a copy of which can be found at http://4fri.org/pdfs/newsletter/2011 Oct Newsletter.pdf.

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

This project is in the start-up phase and therefore cannot report results from multi-party monitoring. However, collaborative monitoring for this effort will be led by the 4FRI Stakeholder Science and Monitoring Working Group in conjunction with the Forest Service. The multi-party monitoring board is expected to be established and operational in FY 2012. The table below displays in draft of potential ecosystem measures that the 4FRI Stakeholder Science and Monitoring Working Group are exploring. A final choice of indicators will depend on the NEPA document and available human and financial resources provided by the Forest Service and stakeholders.

Monitoring Item	Monitoring Indicator	Data Source/Spatial Scale	Scale
Invasive Plants	Species cover	Field & RS	Site, Sub-unit, Restoration unit, Analysis Area, Landscape

Monitoring Item	Monitoring Indicator	Data Source/Spatial Scale	Scale
Landscape Structure	Landscape metrics (patch characteristics; configuration; diversity)	RS	Sub-unit, Restoration Unit, Analysis Area, Landscape
Diversity (plant/wildlife communities)	Species composition; abundance (richness)	Field & RS	Site
Potential Fire Behavior	Crowning index; torching index; rate of spread	RS & Modeling	Sub-unit, Restoration Unit, Analysis Area, Landscape
Soils	Soil compaction; hydrophobicity; erosion; water quality	Field	Sub-unit, Restoration Unit, Analysis Area, Landscape

The social indicators that were proposed by the Stakeholders and sent to the Forest Service on October 1, 2010 as part of the Landscape Strategy have been furthered refined by the Science and Monitoring working group and are currently in *draft* format and include, but are not limited to, the following:

Monitoring Item	Monitoring Indicator	Frequency of Measurement	Data Source/Spatial Scale/Cost					
Economics	Economics							
The byproducts of mechanical forest restoration offset the costs of treatment implementation.	Policy and implementation is benefits of restoration activi	_	include tracking of costs and ket costs and benefits.					
The economic value of ecosystem services provided by restored forests are realized and reinvested to support forest restoration and ecosystem management.	Number, types (FT vs. PT; benefit eligible etc.) wages and locations of direct jobs associated with restoration work and wood utilization.	5 yrs	DES data					
Rural communities receive direct and indirect economic benefits and ecosystem services as a result of forest restoration and resilient forests.	Aspirational goal.							

Monitoring Item	Monitoring Indicator	Frequency of Measurement	Data Source/Spatial Scale/Cost	
The average net cost of treatment per acre for all treatments in the analysis area over a ten year period is reduced significantly.	Aspirational goal. Monitoring could involve tracking costs, but note that it is difficult to track non-governmental costs and non-market values.			
Sufficient harvest and manufacturing capacity exists to achieve restoration of at least 300,000 acres in the next ten years.	Estimate of harvesting and utilization capacity.	5 yrs	Government records, inferences from response to contracts, expert opinion.	
Social Systems				
There is broad public support or acceptance of collaboratively-based forest restoration decisions, processes, and outcomes, including the use of fire as a management tool.	Public support/concerns assessed (minimum threshold of support? 50?)	1. Pre and post treatment 2. Pre and post education/outreach program delivery	Interviews with land managers and focus groups with community members to assess specific issues/concerns, used to develop telephone survey questions./Data analyzed: Short term: within analysis area; Long term: across the four forests/\$30K each pre and post measures per analysis area.	
Social values and recreational opportunities are protected or enhanced through forest restoration activities.	Social values and recreational opportunities assessed	1. Pre and post treatment 2. Pre and post education/outreach program delivery	Targeted focus groups (two/organization) aimed at specific user groups (hunters, hikers, ORV, etc.) and/or telephone survey with general public./Data analyzed: Short term: within analysis area; Long term: across the four forests/Focus groups:\$5-10K per organization; telephone survey (cost as above).	
Rural communities are protected from highseverity fire and their quality of life is enhanced through forest restoration.	1. Frequency and acreage of high-severity fire in and around rural communities (w/in xx miles) 2. Quality of life assessed	1. As projects are completed around communities. 2. Pre and post treatment 3. Pre and post education/outreach program delivery	1. USFS wildfire database within analysis area (short term); across the 4FRI area (long term)/\$500/analysis area. 2. Telephone survey (cost as above).	

Monitoring Item	Monitoring Indicator	Frequency of Measurement	Data Source/Spatial Scale/Cost
Rural communities play an active part in reducing fire risk by implementing FIREWISE actions and creating defensible space around their property.	1. Number of households/neighborhoods that are implementing (the degree of) "Fire Wise" principles 2. Number of communities in the analysis/4FRI area that are recognized as "Firewise".	1. Pre and post treatment 2. Pre and post education/outreach program delivery	1. Telephone survey (cost as above) 2. Interview fire station personnel in neighborhood/home assessments and/or field survey logs \$2/\$5K 3. # of neighborhoods certified through Firewise communities/\$500
Treatments within the analysis area minimize short-term impacts and enhance vegetation characteristics valued by Forest users over the long-term.	Forest user perceptions of treatments within the analysis area.	1. One year post- treatment 2. 5 years post treatment.	Multiple field trips with Forest users (random selection of participants to adequately represent general public)/Analysis area/\$5K
There is low potential for fires to enter communities. Communities and homeowners are prepared for the undesirable case that fires that do enter communities.	1. Fire modeling 2. Number of households and neighborhoods implementing "Fire Wise" principles	1. Pre and post treatment in WUI communities. 2. Pre and post education/outreach program delivery	1. 4FRI Science & Monitoring WG/Communities within analysis area/Cost?
Fire management costs are reduced; aggressive fire suppression is unneeded or rare.	Forest Service fire suppression costs 2. Number and acreage of USFS suppressed wildfires	10 yrs.	Forest Service records. National Interagency Fire Center records on wildfire occurrence/Analysis area/\$1K

The proposed monitoring will be multi-party and multi-scale and will contribute to an adaptive management strategy. One of the inherent strengths of the 4FRI effort is that it brings together science providers and interpreters from academia, NGOs, and resource management agencies. This group brings to the effort decades of work experience in the 4FRI landscape as well as substantial public and private resources vital to any monitoring program's long-term success. Key researchers who developed an understanding of how fire disturbance works in southwestern ponderosa pine communities, how these communities have changed since European-settlement, and how these factors influence wildlife and forest health participate in the 4FRI. Many of the stakeholders who have worked for decades with these researchers are also participating.

Multi-party monitoring is a well established way of engaging stakeholders in the 4FRI Region and includes implementation monitoring to ensure that treatment prescriptions designed to meet the desired condition are followed. Lessons learned from other monitoring efforts are being used to inform the design of the 4FRI monitoring strategy.

Annual reporting will be conducted and will tie directly to the goals and objectives laid forth in the Collaborative Forest Landscape Restoration Act (CFLRA) (such as, acres treated, economic benefits realized, monitoring results, and cost summaries), 10-Year Strategy from the Western Governors' Association (December 2006), and the Performance

Accountability Systems associated with the Forest Service's databases. Annual reports will be an essential component in evaluating and communicating the effectiveness and efficiency of restoration treatments across the 4FRI treatment area and will support a long-term process of adaptive management. The reports will be based on a transparent effort among all relevant stakeholders to ensure data is coordinated, timely, accurate, and scientifically supported. Key contacts within all relevant land management agencies, existing and future multi-party monitoring groups, and academia will be established to ensure critical data needs are sustained.

6. FY 2011 accomplishments

Performance Measure	Unit of measure	Total Units Accomplished ⁸	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) ⁹
		177	\$19,293	CWKV,RTRT
		340	\$71,293	NFN3
		4,297	\$501,990	NFVW
		31,754	\$105,608	NFWF
		8	\$29,600	NFXN
	Acres	35,872	\$5,901,818	CONT
	Acres	3585	\$486,706	PTNR
		301	\$30,100	RTRT
Acres treated annually to		104	\$26,000	RTRT, NFXN
sustain or restore		25	\$21,000	WFW3
watershed function and		867		XXXX
resilience		77,330	\$7,193,408	
		1	\$100	RTRT
Acres of forest vegetation	A	112	\$26,000	RTRT, NFXN
established	Acres	8	\$29,600	NFXN
		TOTAL 121	TOTAL \$55,700	
		4	\$800	CONT
		177	\$19,293	CWKV,RTRT
		1712	\$41,088	NFTM
		94.5	\$51,975	NFVW
Acres of forest vegetation	Acres	300	\$30,000	RTRT
improved		563	\$140,820	SPS4
		391	\$91,650	WFHF
		5,623	\$68,578	XXXX
		TOTAL 8,864	TOTAL \$444,204	
		130	\$1,000	NFN3
Manage noxious weeds		8	\$0	NFTM
and invasive plants	Acre	2,408	\$130,015	NFVW
·		TOTAL 2, 546	TOTAL \$131,015	
Highest priority acres treated for invasive terrestrial and aquatic	Acres	0	\$0	

⁸ Units accomplished should reflect the accomplishments recorded in the Databases of Record.

⁹ 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 ⁸	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) ⁹
species on NFS lands				
		5,694	\$499,900	CFLR
		3,723	\$2,538,760	WFHF
Acres of water or soil		33	\$51,000	NFN3
resources protected,		290	\$105,000	NFTM
maintained or improved to achieve desired watershed	Acres	1,794	\$320,000	NFVW
conditions.		208	\$40,000	SPS4
conditione.		25	\$21,000	WFW3
		тотаl 11,767	TOTAL \$3,575,660	
Acres of lake habitat restored or enhanced	Acres	0		
Miles of stream habitat restored or enhanced	Miles	0		
		31,754	\$105,608	NFWF
Acres of terrestrial habitat		28,840	\$1,687,000	WFHF
restored or enhanced	Acres	35,872	\$5,901,818	NONE
		3,585	\$486,706	PTNR
		TOTAL 99,751	TOTAL\$8,181,132	
Acres of rangeland vegetation improved	Acres	78	\$3,900	NFWF
Miles of high clearance system roads receiving maintenance	Miles	46		CMRD
Miles of passenger car		176		CMRD
system roads receiving	Miles	69		NONE
maintenance		TOTAL 245		
Miles of road decommissioned	Miles	0		CMRD
Miles of passenger car system roads improved	Miles	23		CMLG
Miles of high clearance system road improved	Miles	0		
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage	Number	1		НТАР
		38.4		CMLG
Miles of system trail	Miles	24.9		CMTL
maintained to standard	ivilles	7.6		NFN3
		TOTAL 70 .8		
Miles of system trail improved to standard	Miles	5.3		CMLG
Miles of property line marked/maintained to standard	Miles	0		
Acres of forestlands treated using timber sales	Acres	867		
Volume of timber sold	CCF	7,745		CFLR

Performance Measure	Unit of measure	Total Units Accomplished ⁸	Total Treatment	Type of Funds (CFLR, Specific FS BLI, Partner Match) ⁹
			Cost (\$)	
(CCF)		85,305		NFTM
		1,911		SSSS
		TOTAL 94,961		
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production	Green tons	220,977		XXXX
Acres of hazardous fuels		563	\$140,820	SPS4
treated outside the		3,538	\$430,760	WFHF
wildland/urban interface	Acre	1,486	\$0	XXXX
(WUI) to reduce the risk of catastrophic wildland fire		TOTAL 5,587 ¹⁰	TOTAL \$571,580	
		478	\$52,816	PTNR
		21	\$2,289	CWKV
Acres of wildland/urban		1,712 \$41,088	NFTM	
interface (WUI) high priority hazardous fuels		189	\$103,950 NF	NFVW
treated to reduce the risk	Acres	456	\$66,297	RTRT
of catastrophic wildland		20,115	\$2,734,573	WFHF
fire		5,845	\$68,800	XXXX
		TOTAL 28,816 ¹¹	TOTAL \$3,069,813	
Number of priority acres treated annually for invasive species on Federal lands	Acres	0		
Number of priority acres		28	\$171,800	SPFH
treated annually for native	Acres	705	\$12,200	SPS4
pests on Federal lands		TOTAL 733	TOTAL \$184,000	_

7. FY 2011 accomplishment narrative (summarizes key accomplishments and evaluates project progress) (please limit answer to three pages).

The goal of the 4FRI is to achieve ecological restoration across ~2.4 million acres of contiguous ponderosa pine forest on National Forest System lands in northern Arizona. 12 Restoration can be defined as a suite of intentional actions that initiate or accelerate ecosystem recovery with respect to health (functional processes), integrity (composition & structure), and sustainability (resilience & resistance to disturbance). Restoration attempts to return an ecosystem to its historic trajectory, although a restored ecosystem may not necessarily recover its former state since contemporary constraints and conditions can cause it to develop along an altered trajectory.

¹⁰ There are 324 acres accounted for in FACTS that are not captured in PAS for a total of 5,911 acres accomplished.

¹¹ There are 178 acres accounted for in FACTS that are not captured in PAS for a total of 28,993 acres accomplished.

¹² This area was identified in the Analysis of Small-Diameter Wood Supply in Northern Arizona (Hampton et al. 2008). All but 6% of these acres consist of NFS lands. The 4FRI landscape strategy covers all 2.4 million acres of the ponderosa pine belt on the National Forests of northern Arizona.

Prior years (FY 2010) were achieved primarily under the normal programs of work on the four forests. The Apache-Sitgreaves National Forest (ASNF) has put the majority of its restoration efforts into the White Mountain Stewardship Contract (WMSC).

Restoration accomplishments to date FY 2011: The following summarizes the work to date on specific restoration efforts on the 4FRI landscape.

Phase 1 4-FRI Stewardship Project

In May of 2011, the Southwestern Region (AZ and NM) of the USDA Forest Service offered a solicitation ¹³ to perform a large landscape scale, multiyear forest restoration project in central Arizona under the authorities of the 16 U.S.C. 2104 Note, Stewardship End Result Contracting Projects Act (The Act). The objective of this project is to treat 300,000 acres of ponderosa pine forest types by thinning and harvesting mainly small diameter trees in excess of ecological requirements over a ten-year contract period. It is expected that most treatment areas will accommodate ground-based harvest systems with some temporary road construction requirements and minor amounts of road reconstruction. Areas proposed for treatment are scattered across four forests - Tonto, Kaibab, Coconino, and Apache-Sitgreaves National Forests.

Overall, the four forests identified approximately 45,000 acres of "shelfstock sales" for inclusion in the Request for Proposals and Solicitation for the Phase 1 4-FRI Stewardship Project. The table displays the sales identified as shelfstock sales.

		Approximate size Year planned		
Project name	Forest	(acres)	for treatment	Year planned for prep
Bob's	Coconino	2,000	2012	complete
Elk Park	Coconino	2,900	2012	complete
Clark	Coconino	1,600	2012	complete
Pomeroy	Kaibab	1,740	2012	complete
KA	Kaibab	1,050	2012	complete
Jack Smith/Schultz	Coconino	2,000	2013	2012
East side	Coconino	1,700	2013	2012
Weatherford	Coconino	1,000	2013	2012
Railroad	Coconino	250	2013	2012
East Clear Creek	Coconino	4,700	2013	2012
Community Tank	Kaibab	865	2013	complete
Dogtown	Kaibab	1,700	2013	complete
Upper Beaver	Coconino	2,000	2013	2012
Munds Park	Coconino	400	2014	2012
City	Kaibab	600	2014	complete
McCracken #1 and #2	Kaibab	3,550	2014	2012
Christopher	Tonto	1,000	2014	2012

¹³ Solicitation can be found at:

https://www.fbo.gov/index?s=opportunity&mode=form&id=07c7394875da1b513fb2d5b778b69dcc&tab=core& cview=1

Project name	Forest	Approximate size (acres)	Year planned for treatment	Year planned for prep
Myrtle	Tonto	1,000	2014	2013
Timber Mesa	A-S	10,000	2014	5,000 in 2012 & 5,000 in 2013
Rim Lakes	A-S	5,000	2014	2,500 in 2012 & 2,500 in 2013

The solicitation closed on September 6, 2011 and is expected to be awarded by the end of 2011. Implementation of the contract is expected to begin in FY 2012. Activities to support the contract that occurred in 2011 include the following:

- On the Apache-Sitgreaves National Forest:
 - wrote prescriptions, marked and cruised 5,000 acres of shelfstock sale areas on the Rim Lakes Shelfstock Area
- On the Coconino National Forest:
 - Completed prescriptions, marked and cruised 1,600 acres of the Clark Shelfstock Area
 - Re-mark approximately 445 acres of the Weatherford Shelfstock area that was burned in the Schultz Fire (2010).
 - Wrote prescriptions on 500 acres on the Eastside Shelfstock Area.
 - Completed Threatened, Endangered and Sensitive Species surveys on 7,000 acres of Shelfstock Areas
 - See discussion below on acres of noxious weeds surveyed and treated prior to treatment on Shelfstock acres.
- On the Kaibab National Forest
 - Completed boundary layout work on approximately 2,800 acres of the McCracken 1 and 2 projects. Additionally, we completed the layout, marking and timber cruises on the Community Tank (~865 acres) and City (~600 acres). Completed adjustments (re-mark and re-cruise portion affected by Northern goshawk) to KA and Pomeroy due to location of a new northern goshawk.
 - Re-mark of approximately 1,740 acres of the Dogtown Shelfstock Area because paint was no longer visible.
 - Completed Threatened, Endangered and Sensitive Species surveys on 2,900 acres of Shelfstock Areas.
 - See discussion below on acres of noxious weeds surveyed and treated prior to treatment on Shelfstock acres.
- On the Tonto National Forest
 - Personnel from the Payson Ranger District worked on the Apache-Sitgreaves National Forest and assisted with the Rim Lakes Shelfstock sale preparation work listed above.

On the Coconino and Kaibab National Forests, two contracts with Coconino Rural Conservation Corps totaling \$60,000 were funded by the initiative. \$55,000 of this was spent on the Coconino NF. The remaining amount was spent on the neighboring Kaibab NF. As a result of this funding, 2,700 acres were surveyed for Region 3 sensitive plant species. The crews found numerous occurrences of Rusby milkvetch and Arizona sneezeweed. The second contract was used to survey and manually control noxious or invasive weeds on "shelf stock" projects on the Coconino National Forest. This resulted in over 14,000 acres of survey and control. Each of the projects above utilized CFLR funding to accomplish the activities.

In 2011, the Forest Service and 4FRI Stakeholders continued to work towards a common restoration goal. In February, the Forest Service and Stakeholders agreed on a Memorandum of Understanding that states the commitment by signatories on how they will work together restoring health to northern AZ ponderosa pine forests.

Other Restoration Work within the 4FRI area

The Apache-Sitgreaves offered and sold the first 4FRI specific restoration activities in the summer of 2011. Specifically, the following actions occurred:

- offered and sold Mineral C Whiting Sale, 1,244 acres and 10,273 CCF (June 2011)
- offered and sold Mineral C Thompson Sale, 4,450 acres and 30,908 CCF (August 2011)

In addition to this work, the remaining restoration work that has occurred to date on the 4FRI landscape has been primarily under the normal programs of work on the four forests that utilized appropriated funds that are not CFLR funds, as well as grants and agreements. The current large 4FRI collaborative group has not reviewed each project, however, all projects (with the exception of wildfire related restoration acres), have been through NEPA processes which many of the individual stakeholders were participants in. In 2012, there will be a process outlined and a table displaying the review of each match project by the large collaborative group. The Apache-Sitgreaves National Forest (ASNF) has put the majority of its restoration efforts into the White Mountain Stewardship Contract (WMSC), as well as salvage from the Wallow Fire.

In addition, in FY 2011, planning and developing monitoring protocols were achieved. Stakeholder involvement has included work within the planning realm (input into the first 4FRI EIS on approximately 998,000 acres) and within the monitoring realm. The Science and Monitoring group within 4FRI stakeholder group has worked with the Forests to develop draft planning protocols for long-term monitoring. The end result of this will be a transition to a stakeholderled, multi-party monitoring board in FY 2012. The Science and monitoring team is developing monitoring techniques that will be conducted for environmental, economic, and social impacts, and will include implementation monitoring to ensure that treatment prescriptions are followed.

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?¹⁴

Fiscal Year	Total number of acres treated (treatment footprint) ¹⁵
FY 2010	51,543
FY 2010 and FY 2011	109,006

9. Describe other relevant fire management activities within the project area (hazardous fuel treatments are already documented in Question #6):

¹⁴ 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.

¹⁵ Based upon fuel treatment acres only from FACTS, FY 2010 and FY 2011. These include acres of unplanned fires managed for resource objectives (29% of treatment acres in 2010 and 64% of treatment acres in 2011—average of 47% of treatment acres of the 2 year timeframe).

The 538,000 acre Wallow Fire (504,500 acres occur within the 4FRI planning footprint on the 4 Apache-Sitgreaves NF) started May 29, 2011, at the height of the Apache-Sitgreaves National Forests fire season, when strong southwest winds and low humidity's are prevalent and frequent. The 2011 fire season was intensified by the combination of a lack of 2010-11 winter precipitation, and high loading of fine grass fuels remaining from the previous year. The extent and severity of the fire affected not only forest ecosystems and resources, but impacted the lives and livelihoods of the residents of Apache and Greenlee counties as well as residents across the region. While immediate response to watershed and flooding issues have commenced and are on-going, the effects of the Wallow fire will present managers of the ASNF with complex challenges for years (in some cases decades) to come. Total wildland fire acres burned for the 4 Forest areas are included in the table below.

	total wildland		
Forest	fires acres		
Apache/Sitgreaves	107	540,623	
Coconino	241	14,605	
Kaibab	110	15,473	
Tonto	187 21,990 ¹⁶		
	645	592,691	

The table below summarizes the major fires over 300 acres for the project area. The Wallow Fire burned approximately 504,000 acres within the 4 FRI project area out of the total 538,151 acres burned. The total acres of resource benefit fires that were unplanned ignitions within the 4FRI project acres approximately 37,450 acres. The total fires that were full suppression fires that exceed 300 acres within the project are approximately 507,000 acres.

Fire Name	Forest	Туре	acres
Armstrong	Kaibab	resource benefit	2,679
Beale	Kaibab	resource benefit	5,100
Beef	Coconino	resource benefit	322
Bluff	Tonto	resource benefit	3,216
Bolt	Coconino	resource benefit	1,792
Engineer	Coconino	suppression	596
Fly	Coconino	resource benefit	898
Horton	Tonto	suppression	390
Parallel	Kaibab	resource benefit	4,348
Rocky	Coconino	resource benefit	5,003
Sand Rock	Coconino	resource benefit	4,601
Scout	Coconino	resource benefit	809
Skinner	Kaibab	resource benefit	2,106
Tanner	Tonto	resource benefit	5,460
Wallow	A-S	suppression	538,151 ¹⁷
Wash	A-S	suppression	1,954

¹⁶ Most of the Tonto National Forest acres burned is outside of the 4FRI project area. See the next table for a list of fires within the Tonto National Forest that exceed 300 acres and are within the 4FRI footprint area.

¹⁷ 504,000 acres are within the 4FRI footprint.

Fire Name	Forest	Туре	acres
Woodbridge	Kaibab	resource benefit	1,110

Total costs of suppression (this includes unplanned ignitions managed for resource benefits) and BAER treatments for the 4 Forests are included in the table below. The exact costs within the 4FRI analysis area are reduced on the Apache-Sitgreaves, Tonto, Kaibab, and Coconino for fires outside of the 4FRI footprint, for an approximate total suppression costs of approximately \$125,000,000 for the 4FRI area as a whole.

Forest	Costs
Apache-Sitgreaves	\$116,364,703
Coconino	\$5,137,758
Kaibab	\$2,159,800
Tonto	\$7,352,215
Total	\$131,014,476

Fuel treatment Effectiveness reports have been completed for the Wallow Fire (Alpine WUI project), Beale (Kendrick Burn Plan), and the Sandrock Complex (Pocket Baker project). The most dramatic change in fire behavior was experienced with the Alpine WUI project on the Wallow Fire. The Alpine WUI project allowed fire managers to do direct attack within the treated area, use the treatment for burnout operations. In addition, fire spread was arrested in the treatment area. For more information of fuel treatment effectiveness within the Wallow Fire, please see the following link: http://wildfirelessons.net/documents/Wallow_Fuel_Treatment_Effectiveness.pdf

10. There are no miles of temporary road constructed or decommissioned in 2011 because the project is just beginning to be implemented with the award of the Mineral C Whiting Sale in June 2011 and the Mineral C Thompson Sale in August 2011. The acres treated in FY 2012 are expected to increase as the new 300,000 acre contract is awarded and harvest of the two Mineral C contracts increases, as will miles of temporary road construction/decommissioned.

Temporary roads status

Number of miles of temporary road constructed in	Number of miles of temporary road decommissioned in	
Fiscal Year 2011	Fiscal Year 2011	
0	0	

11. Describe any reasons that the FY 2011 annual report does not reflect your project proposal and 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 project is just beginning. We are still on the basic schedule outlined in the proposal. The work plan that was submitted in FY11 will need to be updated as the project progresses (please see question 13 and 15 for updates to the original workplan). The planned amount of CFLRP funding in the original FY 2011 work plan submission was for \$4,000,000. The actual amount received was for FY 2011 was \$3,500,000. Due to extended continuing resolutions, these funds were not received until June of 2011. These funds are being used to prepare and implement FY13 and FY 14 expected shelf stock areas in anticipation of task orders to the new contract in FY 2012. In FY 11, all expected acres of preparation were completed in anticipation of the award of the first 300,000 acre contract using a combination of FY 2010 and FY 2011 CFLR funds, as well as matching funds. The process of tracking match funds was poorly implemented

and resulted in an under representation of matching funds. This was identified as an issue and will be resolved in FY 2012

12. Planned FY 2012 accomplishment narrative:

There will be two main accomplishments in FY 2012 that are consistent with the original plan submission. First, there will be an award of the first 300,000 acre contract (Phase 1- Four Forest Restoration Initiative). This will accelerate the acreage treated within the 4FRI footprint. The acres treated are expected to be approximately 10,000 additional acres in excess of the current Four Forest program, but will be dependent upon the ability of the entity awarded the contract to manufacture material (there may be a delay in treatment based upon the need for the entity awarded the contract to construct a manufacturing facility). Second, multi-party monitoring will be established. A parallel achievement will be that the completion of the first EIS¹⁸. This is expected to occur in the fourth guarter of FY 2012, which will pave the way for the preparation and implementation of approximately 30,000 acres per year by FY 2016.

Challenges in FY 2012 include the potential uncertainty of receiving FY 2012 CFLR dollars due to continuing resolutions and the election year. If these funds are not received, this will affect the ability to prepare enough acres in FY13 to meet work plan expectations. Another challenge to the 4FRI project will be will be to determine the affect of the Wallow Fire on the 4FRI project. At this time, the affect from the fire on the project is unknown.

13. Planned FY 2013 Accomplishments

Performance Measure Code 19	Unit of measure	Average Planned Accomplishment	Addition Over Average Planned Accomplishment w/ 4FRI	Amount (\$)
Acres treated annually to sustain or restore watershed function and resilience	Acres	178,205	79,300	
Acres of forest vegetation established	Acres	1,000	100	\$36,300 ²⁰
Acres of forest vegetation improved	Acres	13,700 ²¹	15,000	\$3,615,000 ²²
Manage noxious weeds and invasive plants	Acre	4,30021 ²¹	500	\$461,000 ²³

⁴ FRI planning documents can be found at the following link:

http://www.fs.usda.gov/wps/portal/fsinternet/!ut/p/c4/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gjAwhwtDDw9_Al8zPwhQoY6BdkOyo CAPkATIA!/?ss=119900&navtype=BROWSEBYSUBJECT&cid=null&navid=1410000000000000&pnavid=null&position=BROWSEBYSUBJE CT&ttype=main&pname=Four Forest Restoration Initiative- Planning Documents

¹⁹ Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2013 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 15.

²⁰ Based on historic average cost of \$33/acre

²¹ In original work plan

²² Based on average cost per acre of \$177/ acre for average planned accomplishment acres and 4FRI additional acres x the average cost reported in FY 2011 of \$41.49/acre.

²³ Based on average cost per acre of \$100/ acre for average planned accomplishment acres and 4FRI additional acres x the average cost reported in FY 2011 of \$62.22/acre

Performance Measure Code ¹⁹	Unit of measure	Average Planned Accomplishment	Addition Over Average Planned Accomplishment w/ 4FRI	Amount (\$)
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands	Acres	100	25	\$11,500 ²⁴
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions.	Acres	12,200 ²¹	15,000	\$1,360,000
Acres of lake habitat restored or enhanced	Acres	5	0	
Miles of stream habitat restored or enhanced	Miles	10	2	
Acres of terrestrial habitat restored or enhanced	Acres	72,000 ²¹	15,000	
Acres of rangeland vegetation improved	Acres	30,000	15,000	\$3,060,000 ²⁵
Miles of high clearance system roads receiving maintenance	Miles	1,000 ²⁶	150	\$442,750 ²⁷
Miles of passenger car system roads receiving maintenance	Miles	1,000 ²⁶	50	\$6,244,350 ²⁸
Miles of road decommissioned	Miles	15	10	\$25,000 ²⁹
Miles of passenger car system roads improved	Miles	32 ³⁰	10	\$320,000 ³¹
Miles of high clearance system road improved	Miles	10 ³⁰	30	\$200,000 ³²
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage	Number	0	0	
Miles of system trail maintained to standard	Miles	100	0	\$100,000
Miles of system trail improved to standard	Miles	5	0	\$10,000
Miles of property line marked/maintained to standard	Miles	2	2	\$160,000

²⁴ Same assumption as footnote above

²⁵ Based on historic average cost of \$68/acre

²⁶ The original work plan mileage in the original workplan is 4,024 miles. This is reduced to 1,000 miles for high clearance and 1,000 miles for passenger car roads annually. See question 15 for full explanation of the reduction.

²⁷ Regional average of \$385/mile for level 2 road maintenance

²⁸ Regional average of \$5,947/mile for level 3 road maintenance

²⁹ Average of \$1,000/mile for road decommissioning

³⁰ In original work plan as miles of road improved (total of 42 miles). This work plan splits the mileage between miles for passenger car improved (32 miles) and miles of high clearance roads improved (10 miles) for a total of 42 miles as per the original work plan.

³¹ Average of \$10,000 per mile for passenger car road improved

³² Average of \$5,000 per mile for high clearance road improved

Performance Measure Code 19	Unit of measure	Average Planned Accomplishment	Addition Over Average Planned Accomplishment w/ 4FRI	Amount (\$)
Acres of forestlands treated using timber sales	Acres	6,000	O ³³	
Volume of timber sold (CCF)	CCF	126,500 ²¹	120,000 ³⁴	
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production	Green tons	300,000	52,5 00 ³⁵	
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire	Acre	40,000 ³⁶	5,000	\$3,159,900 ³⁷
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire	Acres	32,000 ³⁶	10,000	\$2,949,240 ³⁸
Number of priority acres treated annually for invasive species on Federal lands	Acres	600	100	
Number of priority acres treated annually for native pests on Federal lands	Acres			

14. Planned FY 2013 accomplishment narrative: We are expecting to complete all necessary layout, preparation, and implementation of projects identified in the FY 2013 work plan, however, there are two items that may affect accomplishment of acres. The contract that will be awarded in FY 2012 may not be fully operational in FY 2013 because the manufacturing facility(s) may not be fully constructed, thus the contractor may not fully treat all expected acres. Second, if the Forest Service budget is decreased, then potential impacts to Forest Service matching funds could be decreased, which could impact the ability to fully complete all necessary preparation and implementation necessary to fulfill the contract expectations.

³³ The acres of timber sales are expected to stay similar to the existing. Because the solicitation is a stewardship contract, it is expected that the total acres treated by stewardship contract would increase by 15,000 acres in Fy 2013.

³⁴ Will be dependent on manufacturing capacity of recipient of the first 300,000 acre contract.

³⁵ This number could increase significantly if the recipient of the first contract has a biomass provision within the contract. This number could also be dependent on manufacturing capacity of recipient of the first 300,000 acre contract.

³⁶ In original work plan as acres of fuels treated (total of 72,000 acres). This work plan splits the acreage between acres of fuels treated outside the WUI (40,000 acres) and acres of fuels treated inside the WUI (32,000 acres) for a total of 72,000 acres as per the original work plan.

³⁷ Uses average actual cost per acre in 2011 of \$70.22/acre

³⁸ Uses average actual cost per acre in 2011 of \$70.22/acre

15. Describe and provide narrative justification if planned FY 2012/13 accomplishments and/or funding differs from CFLRP project work plan:

The original work plan identified a total of 4,024 miles of road maintenance was to be completed annually. Since the original submission, road management budgets have been decreased in half nationwide, thus limiting the ability to complete the entire 4,024 road miles. At this time, it is expected that a total of 2,000 miles will be completed by the base program, with 4FRI adding an additional 200 miles annually. As this amount is adjusted, the work plan will be adjusted accordingly.

The following items were not included in the original CFLRP work plan submission. These items have been added and are based on the accomplishments for the last two fiscal years for these work items.

Performance Measure Code	Unit of measure	Average Planned Accomplishment	Addition Over Average Planned Accomplishment w/ 4FRI	Amount (\$)
Acres treated annually to sustain or restore watershed function and resilience	Acres	178,205	79,300	
Acres of forest vegetation established	Acres	1,000	100	\$36,300
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands	Acres	100	25	\$11,500
Acres of lake habitat restored or enhanced	Acres	5	0	
Miles of stream habitat restored or enhanced	Miles	10	2	
Acres of rangeland vegetation improved	Acres	30,000	15,000	\$3,060,000
Miles of high clearance system roads receiving maintenance	Miles	1,000	150	\$442,750
Miles of passenger car system roads receiving maintenance	Miles	700	50	\$4,460,250
Miles of road decommissioned	Miles	15	10	\$25,000
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage	Number	0	0	
Miles of system trail maintained to standard	Miles	100	0	\$100,000
Miles of system trail improved to standard	Miles	5	0	\$10,000

Performance Measure Code	Unit of measure	Average Planned Accomplishment	Addition Over Average Planned Accomplishment w/ 4FRI	Amount (\$)
Miles of property line marked/maintained to standard	Miles	2	2	\$160,000
Acres of forestlands treated using timber sales	Acres	6,000	0	
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production	Green tons	300,000	52,500	
Number of priority acres treated annually for invasive species on Federal lands	Acres	600	100	
Number of priority acres treated annually for native pests on Federal lands	Acres			