CFLR Project(Name/Number): Accelerating Longleaf/CFLRP10 National Forest(s): National Forests of Florida, Osceola Ranger District

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

### 1. Match and Leverage funds:

## **FY12 Matching Funds Documentation**

Fund Source	Total Funds Expended in Fiscal Year 2012(\$)*
CFLR Funds Expended <sup>1</sup>	\$1,411,626 CFLN
	-\$3,272 CFLR
Carryover funds expended <sup>2</sup> (please include a new row for each BLI)	\$87,500 WFHF
	\$42,321 NFTM
	\$107,944 NFVW
	\$78,880 NFWF
FS Matching Funds	\$609,025 WFHF
(please include a new row for each BLI) <sup>3</sup>	\$189,127 NFTM
	\$48,212 NFVW
	\$53,900 NFWF
	\$228,498 SSSS
	\$148,307 CWKV
	\$15,465 CMRD
	-\$3533 RTRT
	-\$6732 WFW3
	\$96.44 WRHR
Funds contributed through agreements <sup>4</sup>	\$49,400 Arbor Day Foundation
	\$16,250 National Forest Foundation
Partner In-Kind Contributions <sup>5</sup>	0
Service work accomplishment through goods-for services funding within a stewardship contract <sup>6</sup>	0
	- <del>·</del>

<sup>\*</sup>Not all funds originally available were expended due to fire transfer; if unspent carryover is made available then additional mechanical fuel reduction will be accomplished.

<sup>6</sup> This should be the amount in the "stewardship credits charged" column at the end of the fiscal year in the TSA report TSA90R-01.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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 tited Listing and Expenditure Report – Detailed Analysis by Fiscal Year minus the below matching funds.

<sup>&</sup>lt;sup>3</sup> This amount should match the amount of matching funds obligated in the PAS report titled CFLR Job Code Listing and Expenditure Report – Detailed Analysis by Fiscal Year minus the above carryover/HPRP funds.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> 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.

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

The Florida Forest Service (FFS) expended \$248,000 dollars in fuel reduction and ecological restoration on John Bethea State Forest (JBSF), located within the eastern portion of the CFLRP Footprint. The National Forest Foundation provided Tall Timbers Research Station (TTRS) with a grant of \$10,000 to conduct an economic impact study on CFLRP activities for 2010-2012.

Approved by :	
Forest Supervisor	

2. Discuss how the CLFR project contributes to accomplishment of the performance measures in the 10 year Comprehensive Strategy Implementation Plan<sup>7</sup>, 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).

Performance Measure	Units
Percent change from 10-year average for wildfires controlled during initial attack	-3% Change
Percent change from 10 year average for number of unwanted human-caused wildfires	-17% Change
Percent of fires not contained in initial attack that exceed a stratified cost index	0
Number and percent of WUI acres treated that are identified in CWPPS or other application collaboratively developed plans	4,514 acres; 4%
Number and percent of non-WUI acres treated that are identified through collaboration consistent with the <i>Implementation Plan</i>	48,348 acres; 41%
Number of acres treated per million dollars gross investment in WUI and non-WUI areas	26,381 acres
Percent of collaboratively identified high priority acres treated where fire management objectives are achieved as identified in applicable management plans or strategies	N/A
Number and percent of acres treated by prescribed fire, through collaboration consistent with the Implementation Plan.	52,762; 100%
Number and percent of acres treated by mechanical thinning, through collaboration consistent with the <i>Implementation Plan</i> .	6,267 acres
Number of acres and percent of the natural ignitions that are allowed to burn under strategies that result in desired conditions	30,292 acres; 33%
Number and percent of acres treated to restore fire-adapted ecosystems which are moved toward desired conditions	52,762 acres; 100%
Number and percent of acres treated to restore fire-adapted ecosystems which are maintained in desired conditions	1,838 acres; 3%
Number and percent of burned acres identified in approved post-wildfire recovery plans as needing treatments that actually receive treatments	0 acres; 0%
Percent of burned acres treated for post-wildfire recovery that are trending towards desired conditions	N/A

The 2012 wildfire season began with significant activity occurring primarily in locations that have not yet been treated as part of CFLRP. The largest fire was the County Line fire which consumed 34,900 acres within the untreated Pinhook

2

<sup>&</sup>lt;sup>7</sup> 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).

Swamp Area. The drought of 2011 and 2012 was quickly erased with the onset of back to back tropical storms. Tropical Storms Beryl and Debbie resulted in area wide flooding with some portions of the forest receiving more than 2 feet of rain in less than 48 hours. Water levels have remained high due to a regular occurrence of rain throughout the summer and into the fall. Assuming typical fall conditions which allow upland drying, with fully recharged wetlands due to summer rains, prescribed fire will be applied broadly across the Osceola landscape during 2013.

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

Workplans were utilized along with expenditures to estimate percentages and numbers plugged into the TREAT tool. Wood utilization is based on historic and current utilization with the assumption that no wood is being utilized in specialized or niche markets.

#### FY 2012 Jobs Created/Maintained (FY12 CFLR/CFLN/HPRP/Carryover funding only):

Type of projects	Direct part and full- time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income <sup>8</sup>
Commercial Forest Product Activities	41.0	78.6	\$1,800,761	\$3,422,063
Other Project Activities	9.0	10.7	\$288,803	\$341,726
TOTALS:	50.0	89.3	\$2,089,563	\$3,763,788

### FY 2012 Jobs Created/Maintained (FY12 CFLR/CFLN/HPRP/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 <sup>9</sup>
Commercial Forest Product Activities	69.4	133.1	\$3,048,214	\$5,792,651
Other Project Activities	9.7	11.6	\$302,406	\$364,194
TOTALS:	79.1	144.8	\$3,350,620	\$6,156,844

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

Contracts were awarded to small corporations within the commuting area. Existing Challenge Cost Share Agreements were modified with Florida Natural Areas Inventory (FNAI) and Tall Timbers Research Station (TTRS) to provide additional funding and work totaling \$30,000 and \$52,500, respectively. Forest management activities have led to the sale of 48,871 ccf adding product to local wood markets at competitive market rates. Anecdotal information through personal communication shows that local vendors have acknowledged an increase in business from increased forest management activities. Collaborators of this project are currently conducting an economic impact study funded through

<sup>9</sup> 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.

3

<sup>&</sup>lt;sup>8</sup> 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.

a grant by the National Forest Foundation. This study is designed to measure local, regional, and national economic impacts of CFLRP related funds spent on the Osceola. The results of this study will be available in 2013.

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

A suite of ecological and biological data is being collected from randomly selected plots to monitor effects which may be extrapolated across the landscape. Forty sites were surveyed in 2012, focusing on avian diversity and abundance; plant diversity and cover; and ecological condition utilizing a ranked tier system. Additionally, vegetation treatments were monitored by the collaborative to determine efficacy of treatments for ecological restoration in pine flatwoods. Preliminary data findings support on-going work is generally moving the Osceola landscape to an improved ecological condition. While the majority of monitoring is being conducted by a Tall Timbers Research Station (TTRS) umbrella, the Cooperative for Conserved Forest Ecosystems: Outreach and Research (CFEOR) is also measuring efficacy of treatment types. These data are utilized to update the Osceola National Forest's, Ecological Condition Model (ECM). This model provides spatial representation of ecological improvement along a continuum and assists with projecting efficiencies of treatment for out-year planning and implementation at the landscape level.

#### 6. FY 2012 accomplishments

Performance Measure	Unit of	<b>Total Units</b>	<b>Total Treatment</b>	Type of Funds (CFLR, Specific FS
	measure	Accomplished 10	Cost (\$)	BLI, Partner Match) <sup>11</sup>
Green tons from small	Green	104.6	\$0	No funds expended due to work
diameter and low value	tons			accomplished through timber
trees removed from NFS lands and made available				harvest
for bio-energy production				
Acres of forest vegetation established	Acres	2,678	\$172,012	CFLN
Acres of forest vegetation improved	Acres	2,115	\$133,900	CFLN
Acres of terrestrial habitat	Acres	12,114	\$116,580	NFWF
restored or enhanced			\$148,307	CWKV
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions.	Acres	16	\$16,000	CFLN
Miles of road decommissioned	Miles	16	\$15,465	CMRD
Volume of timber sold	CCF	48,871	\$425,594	CFLN
(CCF)			\$231,448	NFTM
			\$228,498	SSSS
			\$61,981	NFVW

 $<sup>^{10}</sup>$  Units accomplished should match the accomplishments recorded in the Databases of Record.

<sup>&</sup>lt;sup>11</sup> 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 <sup>10</sup>	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>11</sup>
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire	Acre	40,134	\$469,308 \$523,070	CFLN WFHF
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire	Acres	12,628	\$189,540 \$94,175 \$16,200 \$173,455	CFLN NFVW NFWF WFHF
Number of priority acres treated annually for invasive species on Federal lands	Acres	80	\$2,000 \$30,000	CFLN NFWF

# 7. FY 2012 accomplishment narrative (summarize key accomplishments and evaluate project progress) (please limit answer to three pages).

Increasing Prescribed Fire Acreage - On average, the ONF has been able to prescription burn approximately 25,000 acres of the forest annually. This equates to a fire return interval of 4-5 years (too long to achieve ecological restoration). The widely accepted fire return interval associated with healthy LLP forests is a return interval of 2 to 3 years. To achieve this, the ONF will double the annual prescribed fire acreage to 50,000 acres. In 2012, 49,815 acres were treated by prescribed burning (Performance Measure FP-FUELS-ALL).

Reducing Hazardous Fuel Loads - CFLR funding will be used to extend mulching/mastication contracts to reduce hazardous fuels from an additional 10,000 acres thereby facilitating the reintroduction of prescribed fire into these fire suppressed areas. In 2012, 2,947 acres were mulched with 2,295 acres resulting in stand fuel reduction and 22 additional acres of fire line improvement (Performance Measure FP-FUELS-ALL).

Thinning Small Diameter Trees - CFLR dollars will be used to increase timber sale preparation (cruising and marking contracts) to expand the current sales program from treating 1,921 acres in FY10 to treating 5,000 acres in FY14 and in subsequent years. A combination of standard commercial timber sales and Stewardship Contracts will be utilized to accomplish the increase in sale area acreage. In 2012, approximately 4,000 acres of timber sales occurred to reduce hazardous fuels and convert off-site slash pine to longleaf pine. This was measured as 48,871 ccf sold (Performance Measure TMBR-VOL-SLD).

Harvesting Woody Biomass - Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production were 104.6 green tons. No funds were directly expended for the removal of this biomass. Instead, biomass was a by-product of converting slash pine to longleaf pine. (Performance Measure BIO-NRG).

Groundcover Restoration - Healthy LLP Ecosystems harbor some of the richest biological diversity in the country, most of which occurs on the forest floor in the form of grasses and herbaceous vegetation. Many wildlife and plant species, however, begin to decline as sunlight is shaded by an overly dense forest canopy or midstory. Saw palmetto, a naturally occurring shrub in LLP flatwoods, usually occurs in sparse clumps. However, when LLP forests are fire suppressed, saw palmetto densities increase dramatically and replace the diverse understory. When the density of saw palmetto exceeds 33% cover, imperiled grassland birds such as Bachman's sparrow, Henslow's sparrow and bobwhite are no longer present. A common and effective method of reducing saw palmetto coverage, reducing hazardous fuels, and increasing

grass and herbaceous species is to use a single pass roller chopper followed closely by the application of prescribed fire. Timber stands with high basal areas of small diameter pines will be thinned, chopped, and burned on a 2-3 year rotation, stimulating the grass and herbaceous ground cover. During the 10 year period of this proposal, 21,000 acres will be treated by roller chopping to restore native groundcover. In 2012, 915 acres of palmetto chopping were accomplished but not expressed in CFLRP accomplishment figures through FACTS, however, consideration should be given to the inclusion of this figure in the future. Understory herbaceous restoration is important to partners, the public, and overall ecosystem restoration success.

<u>Decommissioning Trails and Roads/ Hydrological Restoration</u> - There are approximately 850 miles of non-designated routes on the ONF. Many of these non-designated routes are an artifact of historic management and are located on wet sites. The primary environmental impact of these roads is interrupted sheet flow from ditching or where roads have become incised from repeated surface blading. Since implementing a designated travel management system in 2007 the ONF has been monitoring the status of non-designated routes. On dry sites the results of monitoring indicate that most non-designated routes are naturally revegetating. However, on wet sites more active restoration is required. This proposal will actively restore approximately 309 miles over a ten year time frame by blocking road access, planting containerized trees and shrubs, light disking to increase ground cover and/or recontouring ditches and berms to restore normal hydrologic sheet flow. Numerous historic plowed firelines were created on the ONF for both prescribed fire and fire suppression that are interrupting hydrologic sheet flow and have altered the natural hydrology on the forest. In 2012, 32 miles of roads and trails were decommissioned (Performance Measure RD-DECOM and S&W-RSRC-IMP).

Partnerships have strengthened with additional funding contributed by the Forest Service to Challenge Cost Share Agreements with TTRS and FNAI. TTRS continues to monitor ecological impacts in the treatment area and they are also working with Responsive Management to conduct an economic impact analysis. Responsive Management is an internationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. FNAI is conducting additional NNIS surveys for determining treatment sites and measuring efficacy of past treatments. Also, the National Wild Turkey Federation (NWTF) served as a partner with a Stewardship sale at the end of the 2012 Fiscal Year. A new partnership has formed through the newly established Okefenokee/Osceola Longleaf Pine Implementation Team. This partnership will be able to leverage additional funds, especially for state and private non-industrial timberlands.

The 2011 accomplishments are below for comparison to the current fiscal year:

Performance Measure	Unit of measure	Total Units Accomplished	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>13</sup>
Acres of forest vegetation	Acres	1,359	259,753	CFLN/CFLR
established			307,726	WFW3, NFVW,RTRT
	Acres	554*	98,150	SSCC, NFVW, NFTM, RTRT
Acres of forest vegetation improved			94,203	CFLR/CFLN *An additional 265 acres accomplished but not included in the 12/12/11 "pulled" data for a total of 819 acres FS Veg Imp
Acres of terrestrial habitat restored or enhanced			42,123	CFLN

<sup>&</sup>lt;sup>12</sup> Units accomplished should reflect the accomplishments recorded in the Databases of Record.

12

<sup>&</sup>lt;sup>13</sup> 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	Total Treatment Cost (\$)	Type of Funds (CFLR, Specific FS BLI, Partner Match) <sup>13</sup>
	Acres	42, 592	135,603	NFWF, CWKV
Miles of road decommissioned	Miles	16	23,367 5,040	CMRD CFLN
Volume of timber sold (CCF)	CCF	10,629 14,517	264,450 294,555	CFLN NFTM
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire	Acre	15,578	508,700 255,201	WFHF CFLN
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire	Acres	18,985	240,886 84,300	WFHF CFLN

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?<sup>14</sup>

Fiscal Year	Total number of acres treated (treatment footprint)	
FY12	64,808	
FY10, FY11, and FY12	157,462	

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):

The extreme drought conditions persisted during the first nine months of the 2012 fiscal year, increasing risk for prescribed burning near or through wetland areas where heavy fuels and deep organic soils exist. Not only do drought conditions increase extreme fire behavior but extended droughts, such as that experienced in North Florida, reduces "natural lines" for holding fire to upland areas. While there are benefits to burning swamp or wetland habitat during dry periods, ground fires or "muck fires" may increase smoke duration and intensity, release large quantities of carbon into the atmosphere, and cause dramatic changes at the local scale due to plant mortality and hydrologic effects (Watts 2012\*).

Due to this extreme drought, a number of small wildfires and one large wildfire occurred during the early part of 2012. The large wildfire, or County Line Fire, consumed nearly 35,000 acres of the Pinhook Swamp. This fire occurred within the CFLRP project landscape but in an area that had not yet been treated. The fire began due to a lightning strike on private land adjacent to the forest boundary and then spread to Forest Service lands. Much of this area was inaccessible

<sup>14</sup> 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.

<sup>\*</sup> Adam C. Watts, Organic soil combustion in cypress swamps: Moisture effects and landscape implications for carbon release, Forest Ecology and Management, Available online 18 August 2012, ISSN 0378-1127, 10.1016/j.foreco.2012.07.032. (http://www.sciencedirect.com/science/article/pii/S0378112712004380)

due to the nature of the Pinhook Swamp, however, roads were utilized successfully to contain the fire in the swamp and limit its impacts on surrounding landowners.

During mid-summer, tropical storms Beryl and Debbie broke the extended drought with some areas receiving 20 to 30 inches of rain within 24 to 48 hours. This resulted in widespread flooding and significantly impacted the district's ability to conduct normal work activities. While flood waters have generally subsided, many areas still remain very wet and continue to hamper implementation activities and timber harvest. However, if conditions continue to dry, prescribed fire may once again be applied in uplands widely utilizing natural control lines in wetlands, recharged by recent rains.

Overall, prescribed fire utilizing planned ignition was reduced due to drought and extreme fire activity early in the fiscal year followed by extreme flooding and elevated water tables late into the fiscal year. Planned ignition burns were successful in accomplishing objectives but were generally of lower risk, with smaller wetlands contained within the interior of burn units. In addition to prescribed fire, mastication of heavy fuels on 2,800 acres was accomplished mostly in areas of high risk for prescribed fire. An additional 215 miles of fire line preparation were accomplished during 2012, with 192 miles of that line being masticated. This treatment increases fuel breaks in dense habitat and increases understory structural diversity.

Results from 2010-2011 fire data show that average wildfire size on the CFLRP project area was 526 acres in untreated areas to only 2 acres in CFLRP treated areas. All wildfires in the treated areas were less than 14 acres compared to several large wildfires in untreated areas, the largest of which consumed 11,025 acres prior to containment. Data for 2012 is still being compiled and analyzed but there is significant contrast between CFLRP treatment areas and those that have not yet been treated. As this project progresses, wildfires should decrease in size and severity as predicted.

10. Describe any reasons that the FY 2012 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)

Fiscal Year 2012 saw accomplishments very similar to what was planned in our project proposal, planned accomplishments, and work plan despite fire borrowing. Targets were met and in several cases targets were exceeded largely due to affordable contract service rates and the addition of a Stewardship Contract, exchanging goods for services. Extreme drought followed by extreme flooding and late arriving budgets once again made for a challenging year.

# 11. Planned FY 2014 Accomplishments

	Unit of measure	Planned	
Performance Measure Code <sup>15</sup>		Accomplishment	Amount (\$)
Acres of forest vegetation	Acres		
established		1,000	\$500,000
Acres of forest vegetation	Acres		
improved		500	\$234,000
Acres of terrestrial habitat	Acres		
restored or enhanced		8,000	\$100,000

<sup>&</sup>lt;sup>15</sup> Please include all relevant planned accomplishments, assuming that funding specified in the CFLRP project proposal for FY 2014 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.

	Unit of measure	Planned	
Performance Measure Code <sup>15</sup>		Accomplishment	Amount (\$)
Miles of road	Miles		
decommissioned		10	\$60,000
Acres of forestlands treated	Acres		
using timber sales		5,000	\$601,150
Volume of timber sold (CCF)	CCF	30,000	\$400,000
Acres of hazardous fuels	Acre		
treated outside the			
wildland/urban interface			
(WUI) to reduce the risk of		42.000	4720.000
catastrophic wildland fire		42,000	\$720,000
Acres of wildland/urban	Acres		
interface (WUI) high priority			
hazardous fuels treated to			
reduce the risk of		0.000	\$600,000
catastrophic wildland fire		8,000	\$690,000
Number of priority acres	Acres		
treated annually for invasive		70	¢75 000
species on Federal lands		70	\$75,000

## 12. **Planned FY 2014 accomplishment narrative** (no more than 1 page):

Fiscal Year 2014 should see accomplishments in accordance with Florida's Accelerating Longleaf Pine Restoration proposal and will be similar to FY2012 and FY2013. Costs are expected to increase for treatments due to escalating operation costs for contractors. Therefore, targets have been lowered slightly to adjust for anticipated cost increases. However, attempts will be made to counteract increases in treatment charges by investigating creative ways to complete work.

# 13. Describe and provide narrative justification if planned FY 2013/14 accomplishments and/or funding differs from **CFLRP project work plan** (no more than 1 page):

No change for 2013. Anticipated accomplishments have been reduced slightly for 2014 assuming that treatment costs increase based upon local cost forecasts. If costs do not increase and a full level of projected funding is received, then accomplishments will mirror those projected in the CFLRP proposal for Accelerating Longleaf Pine Restoration in Florida.