CFLR Project: **Southwest Jemez Mountains**
National Forest(s): Santa Fe National Forest (forest) and Valles Caldera National Preserve (preserve); together we refer to these as the Lead Partners.

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 FY10 matching funds in addition to FY11 matching funds. Since these numbers will be used as the matching funds totals for FY10 and FY11 going forward, there is a signature block for the Forest Supervisor (or Forest Supervisors if the project spans more than one national forest).

FY10 Matching Funds Documentation – These are rounded to the nearest thousand.

Fund Source	Total Funds Expended in Fiscal Year 2010($)
CFLR Funds Expended (this is different than the amount allocated)[1]	**$341,000**
FS Matching Funds (please include a new row for each BLI)[2]	*Total:* **$1,143,000**
NFTM	$75,000
NFVW	$264,000
WFHF	$5,000
RTRT	$30,000
VCNP	$46,000
ARRA (VCNP)	$603,000
ARRA (SFNF)	$120,000
Funds contributed through agreements[3]	
Partner In-Kind Contributions[4]	**$125,000***
Service work accomplishment through goods-for services funding within a stewardship contract[5]	

* The FY'10 annual report showed $63,000. I cannot locate documentation for this figure. I have inserted the figure of $125,000, taken from the forest's Respect the Rio Program in FY'10. The $125,000 could be augmented by $63,000 should I find the documentation, or it could be inclusive of it. */s/ J. Bain*, SWJM Project Coordinator

[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 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. For FY10, this column should also include matching funds not in the PAS report. For FY11, all Forest Service matching funds should be documented in the PAS report.
[3] 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).
[4] Total partner in-kind contributions for implementation and monitoring of a CFLR project. See "Annual Report instructions" for instructions on how to document in-kind contributions.
[5] This should be the amount in the "stewardship credits charged" column at the end of the fiscal year in the TSA report TSA90R-01.

FY11 Matching Funds Documentation – These are rounded to the nearest dollar.

Fund Source	Total Funds Expended in Fiscal Year 2011($)
CFLR Funds Expended[1]	**$976,477**
FS Matching Funds (please include a new row for each BLI)[2]	*Total:* **$1,431,043**
CMLG	$259,967
CMRD	$20,608
NFLM	$18,087
NFMG	$77
NFTM	$144,478
NFVW	$93,207
NFWF	$154,751
RTRT	$5,494
SPS4	$4,401
WFHF	$252,780
ARRA (SFNF)[6]	$13,443
VCVC[7]	$463,750
Funds contributed through agreements[3]	**$24,681**
Partner In-Kind Contributions[4]	*Total:* **$2,717,131**
Monitoring	$2,327,125
Implementation	$390,006
Service work accomplishment through goods-for services funding within a stewardship contract[5]	

Where provided, the non-federal matching funds used in grants such as 319 and RERI are also counted as match for the Southwest Jemez Mountains CFLRP project in the table above.

How were values for in-kind goods and services determined?

The partners determined the value for their in-kind services using the 2011 CFLRP Annual Report Instructions.

Approved by: */s/ Maria T. Garcia*

MARIA T. GARCIA
Forest Supervisor

[6] The total contracted cost of landline surveys using ARRA funds in the SWJM project area was $133,443. The majority - $120,000 – was expended in FY'10 as shown in the previous table. The balance, $13,443, was expended in FY'11 and is reported here.

[7] The total reported here is the Valles Caldera National Preserve's portion of appropriated match. In FY '11, the preserve didn't use the same reporting system as the national forests, which is why this figure doesn't appear in the PAS report.

2. Discuss how the CLFR project contributes to accomplishment of the performance measures in the *10 year Comprehensive Strategy Implementation Plan*[8], dated December 2006 (please limit answer to one page).

The Southwest Jemez Mountains project addresses the 10-year strategy, as demonstrated by these accomplishments:

- One hundred percent of the acres treated are within a Wildland-Urban Interface area.
- All are identified in Community Wildfire Protection Plans (CWPPs).
- The Lead Partners' selection of acres treated was guided by the priority areas identified in the CWPPs.
- Treatments are designed to reduce fire intensities as described in the National Fire Plan.
- Mechanical treatment of National Forest System lands occurred on 649 acres located near forest communities.
- Fuel loads on 739 acres near the community of Thompson Ridge and on 129 acres on Virgin Mesa were reduced by prescribed fire.
- Piles of slash on 300 acres in the preserve were burned.
- Two unplanned natural ignitions, the Guacamalla Fire (1,558 acres) and the Virgin Canyon Fire (1,707 acres), burned 3,265 acres, moving the burned area towards desired conditions.
- The preserve has identified major rehabilitation work needed in the Las Conchas Fire footprint to protect its obsidian quarries, Indios Creek, and in gullies on the toe slopes of the Rio Medio. No acres in the Las Conchas Fire within the project area have been identified as needing or appropriate for rehabilitation on National Forest System lands.
- No maintenance burns have been conducted since we are in the early stages of treatment.

3. **FY 2011 Jobs Created** (CFLR funding only):

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income
Commercial Forest Product Activities	-	-	**$0**	**$0**
Other Project Activities	**21.2**	**23.8**	**$557,609**	**$639,525**
TOTALS:	**21.2**	**23.8**	**$557,609**	**$639,525**

FY 2011 Jobs Created (CFLR and matching funding):

Type of projects	Direct part and full-time jobs	Total part and full-time jobs	Direct Labor Income	Total Labor Income
Commercial Forest Product Activities	-	-	**$0**	**$0**
Other Project Activities	**44.3**	**48.4**	**$979,790**	**$1,107,304**
TOTALS:	**44.3**	**48.4**	**$979,790**	**$1,107,304**

[8] 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)..

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

The Southwest Jemez Mountains project achieved a number of community benefits this year. Firewood, a mainstay for heat and cooking in this rural area, was widely available for minimal cost. Small forest products, such as latillas and posts, were also sold to local residents. To best serve the public, both the preserve and the forest sold firewood permits. The hazard trees cut in the preserve during the suppression of the Las Conchas Fire were hauled to a central location out of the dangerous burned area. From there, a local non-profit removed the wood and donated it to charity. Inmate work crews prepared lines around burn units by thinning them – work done at low cost to taxpayers and that provides training to the crews.

The Lead Partners co-hosted four public meetings in March of 2011. These meetings provided an overview of the project's restoration strategy and specific information about activities being planned for the next 2 to 3 years. These meetings included an open house that allowed the public to visit one-on-one with resource specialists, planners, and line officers.

The project's implementation and monitoring activities created jobs and income in the local area. The preserve awarded 2 thinning contracts to operators from Rio Arriba County. It is hosting 43 monitoring projects, which bring scientists, students, and volunteers to the area. The funding associated with the 43 monitoring projects in the Preserve totals almost $4 million; that directly related to the Southwest Jemez Mountains project is close to $2.3 million. Dedicated partners and volunteers contributed another $390,000 through in-kind donations.

The Lead Partners led several visits for Congressional staff that increased press coverage highlighting the beauty of the area. The Santa Fe Production Company is in the process of filming a PBS television special on the preserve, forests, fire, and restoration.

The Las Conchas Fire, though devastating, has bolstered support for the Southwest Jemez Mountains project, improving relationships with the local communities and the Volunteer Fire Departments. The contrast between the Southwest Jemez Mountains project and the Las Conchas Fire has afforded an opportunity for public awareness of the need for forest treatments. For example, the public can see that forests thinned prior to the fire on Bandelier National Monument didn't suffer the high-intensity burning that unthinned forests did.

The forest is hosting a group from the Veteran's Corps, which is a working group of returning veterans. They are preparing and protecting over 300 Puebloan archaeological sites for an upcoming prescribed fire. The veterans receive training in forestry and fire-fighting techniques while performing this important work. We've heard anecdotally that having crews in the area has increased the amount of small business activity.

The CFLRP project funding supports 3.4 FTEs (full-time equivalents) for the forest and the preserve. With the matching funds, the number of FTEs rises to 15. Table 3 above displays the total number of jobs and income created for the program funding and for the program and match funding.

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

Overview

The Southwest Jemez Mountains project's monitoring group is composed of staff from the preserve, the forest, The Nature Conservancy New Mexico, and ad-hoc members from the New Mexico Forest and Watershed Restoration Institute and U.S. Geological Survey. This year, the group decided on a set of objectives and measures to monitor the effects of treatments across the landscape. As a component of this monitoring, they agreed to use "integrated ecological plots," an innovative way to measure the response of understory vegetation and subsequently wildlife. The group is in the process of pinning down locations for these plots.

Government agencies, volunteers, non-profit organizations, and contractors are performing the Southwest Jemez Mountains project's multiparty monitoring. The people participating in the monitoring are from the New Mexico Environment Department, The Nature Conservancy New Mexico, Jemez Pueblo, the preserve, the forest, Bandelier National Monument, and private companies. These partners greatly contribute to the overall success of the monitoring. They have begun to collect pre-treatment data on macroinvertebrates, fuel loads, water quality, and riparian condition. The data they gather will document and establish baseline conditions. Future monitoring will document landscape-level changes in ecological conditions such as vegetation, wildlife species, water quality, and socio-economic issues.

The preserve had 43 monitoring projects representing an investment of nearly $4 million underway prior to and during the Southwest Jemez Mountains project's start. The monitoring – performed by a variety of government agencies, universities, and organizations - spans topics like the response of sensitive species, general herbivory, climate change and related shifts in vegetation, watershed function, stream condition, grassland and forest edge dynamics, forest pests and diseases, and wildlife diseases and their relationship to habitat conditions. The results of some of these will contribute to the body of knowledge on the project area's baseline. Not all the monitoring falls in the rubric of the CFLRP program; however, it is funding spent and knowledge of the area that leverages the project overall.

Preliminary Results and Findings

Las Conchas Fire

The Las Conchas Fire, though not a restoration treatment, will provide an unexpected opportunity to compare burned areas against untreated and treated areas in the Southwest Jemez Mountains project footprint. For instance, the preserve had established permanent monitoring sites for things like vegetation and riparian condition prior to the fire. The sites proved critical for recording pre-fire baseline data. For the 30,000 acres burned within the project area in the fire - including the headwaters of the East Fork of the Jemez River, the Rio San Antonio, and Rito de los Indios - the preserve has "reset" the baseline ecological conditions to reflect those recorded after the wildfire. For example, staff had monitored fish populations at thirteen stream locations prior to and then following the Las Conchas Fire in the project area. Flash floods after the fire killed 95% of the brown trout, but populations of the native non-game fish, namely Rio Grande sucker, Rio Grande chub, long-nose dace, and fathead minnow, appeared to have survived in good condition. The assemblage of fish identified after the fire will serve as the new ecological baseline by which to compare treatments.

Another example of data collected prior to and after the Las Conchas Fire is for aquatic macroinvertebrates. Led by a professor from New Mexico Highlands University, we monitored aquatic macroinvertebrates at 9 stream locations following the Las Conchas Fire and compared the results to inventories conducted during

2003 to 2007. Though the species richness and total numbers were slightly reduced, the kinds of invertebrates present appear to have been minimally affected by the post-fire flooding.

Landscape-level monitoring

Crews and volunteers collected data on vegetation at the permanent ecological monitoring sites, sites established in previous thinning areas, and new monitoring plots in and adjacent to the Las Conchas Fire. A total of 110 vegetation plots in Ponderosa pine forests, mixed-conifer forests, and meadows/grasslands were measured by preserve employees and volunteers. These data are being analyzed and results will not be available until December.

Habitat-specific inventories and monitoring of pest and beneficial insects in forests and grasslands, burned and unburned, were conducted at 36 permanent locations and dozens of selected survey locations. For example, we monitored wild turkey populations and their use of newly-thinned forest stands in the preserve, and found that turkeys have begun to move into the thinned areas and now use them for foraging and breeding.

Shifts observed through monitoring

We predicted an increase in the cover and diversity of the understory following thinning. This prediction has been validated through monitoring. Though the understory has responded, so have seedlings. The presence of excessive seedlings shows the importance of using fire after mechanical treatments, as well as the need to continue monitoring masticated areas.

Treatments modified as a result of monitoring

The preserve's silvicultural prescriptions used for the ARRA thinning were diameter-based, meaning to thin from below by taking the smallest trees up to a certain diameter. These prescriptions were contractually simple to administer; however, we've found that the small, healthy trees were removed and larger, damaged, less vigorous trees remain. This is likely to result in a less healthy future forest. Based on this outcome, the preserve's NEPA documents now contain prescriptions that include species, structure, and tree health and vigor.

6. **FY 2011 accomplishments** – Note: No accomplishments reported by the preserve (those highlighed in yellow) are not captured in the database of record because that unit didn't report using the databases of record in FY'11.

Performance Measure	Unit of measure	Total Units Accomplished [9]	Total Treatment Cost ($)	Type of Funds (CFLR, Specific FS BLI, Partner Match)[10]
Acres treated annually to sustain or restore watershed function and resilience	Acres	653 640 3,949 117 *Total* = 5,359	$337,808 $8,700 $536,880 *Total* = $883,388	NFVW NFWF WFHF Partner cash and in-kind donation, VCNP
Acres of forest vegetation established	Acres	0	0	
Acres of forest vegetation improved	Acres	649	$332,808	NFVW
Manage noxious weeds and invasive plants	Acre	0	0	
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands	Acres	0	0	
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions.	Acres	3,949		Integrated
Acres of lake habitat restored or enhanced	Acres	0	0	
Miles of stream habitat restored or enhanced	Miles	1.6 4.5 (VCNP)	$500 $1200 $10,677 $407,788	NFWF NFRW Partner cash and in-kind contribution Estimated, partner cash and in-kind donation
Acres of terrestrial habitat restored or enhanced	Acres	640	$8,700 $8,900 $2,300	NFWF CFLR Partner in-kind contribution
Acres of rangeland vegetation improved	Acres	6,849 10,379	 $23,817	Integrated VCNP
Miles of high clearance system roads receiving maintenance	Miles	23.3 54	$54,600 $30,544	CMRD VCVC
Miles of passenger car system roads receiving maintenance	Miles	12.6	$25,200	CMRD

[9] Units accomplished should reflect the accomplishments recorded in the Databases of Record.

[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 [9]	Total Treatment Cost ($)	Type of Funds (CFLR, Specific FS BLI, Partner Match)[10]
Miles of road decommissioned	Miles	11.1	0	Flooding from Las Conchas Fire decommissioned roads
Miles of passenger car system roads improved	Miles	0	0	
Miles of high clearance system road improved	Miles	0	0	
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage	Number	0	0	
Miles of system trail maintained to standard	Miles	5.5 5.0	$11,000	CMTL VCVC
Miles of system trail improved to standard	Miles	0.35	$1,750	CMLG
Miles of property line marked/maintained to standard	Miles	15.2[11]	$24,080 $13,321 $13,443	CFLR NFLM ARRA (SFNF)
Acres of forestlands treated using timber sales	Acres	0	0	
Volume of timber sold (CCF)	CCF	3,450	0	Revenue from permit sales
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production	Green tons	11,000	0	Revenue from permit sales
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire	Acre	326	$36,065	WFHF
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire	Acres	3,623 764 300	$400,815 $430,540 $38,849	WFHF CFLN (VCNP) VCVC
Number of priority acres treated annually for invasive species on Federal lands	Acres	4	$5,000	NFVW
Number of priority acres treated annually for native pests on Federal lands	Acres	0	0	

Note: The volume and green tons of timber sold do not appear in the database of record (TIM) because these were sold via the permit system. TIM only records timber sales, not permit sales.

[11] This is the mileage completed in FY'11; however, it wasn't properly coded to the SWJM project in the database of record.

7. FY 2011 accomplishment narrative (summarize key accomplishments and evaluate project progress) (please limit answer to two pages).

Collaboration

Staff from the forest, with the Bureau of Indian Affairs and Jemez Pueblo as cooperating agencies, completed analysis under the National Environmental Policy Act to conduct a prescribed burn on over 14,300 acres in the Paliza area.

The forest held a 5-day Climate Change Adaptation Workshop in conjunction with the Carson National Forest. The workshop facilitated collaborative discussion about how climate change affects land management and resources related to fire, specifically in the Jemez Mountains, and water. Fifteen speakers, including land managers and scientists from the Forest Service, University of Arizona, University of California at Santa Barbara, University of New Mexico, New Mexico State University, and NOAA made presentations. Over 100 people attended, including employees from the Forest Service, National Park Service, the preserve, U.S. Geological Survey, New Mexico State Forestry, Jemez Pueblo, Los Alamos National Labs, New Mexico Environment Department, The Nature Conservancy, NOAA, and Bureau of Indian Affairs.

In the fall of 2010, the forest, the preserve, The Nature Conservancy New Mexico, and the New Mexico Forest and Watershed Restoration Institute took a group of land managers from Mexico on a field trip to the Southwest Jemez Mountains Project. Staff made presentations on the CFLRP project, including existing and desired conditions of the project, risks of catastrophic wildfire, and implications of our current and projected land management actions for fire management and climate change. The trip was such a success that two of the managers returned in January for our Climate Change Conference.

In November 2010, project partners from The Nature Conservancy and preserve attended a Fire Learning Network Collaborative Workshop. Events included field trips to sites where long-term collaborations had resulted in restoration projects in critical whooping crane habitat implemented across USFWS and private cattle ranches.

Under a grant from the New Mexico Environment Department, forest staff implemented the "Respect the Rio" program, a successful education program in its 4th year. Interns from the Student Conservation Association made 11 education presentations to an audience of over 1,770 people. They conducted 20 interpretive programs that 580 people attended. They made personal contacts with almost 3,000 campers and visitors over the course of the summer.

We participated with the Forest Service's Regional Office, the National Park Service, Santa Clara Pueblo, the US Army Corps of Engineers, and Bureau of Reclamation in a post-Las Conchas Fire aerial photograph mission of the Jemez Mountains to assess landscape forest and watershed conditions. The digital imagery included full color photographs, infra-red photographs, and ortho-photographs, all with 33 centimeters of resolution on the ground. The preserve collaborated with Los Amigos de Valles Caldera and Jemez Pueblo to plan a long-term monitoring site in the project area.

Restoration accomplishments

Preparation: Forest surveyors identified and marked 15.2 miles of landline boundaries in the project area. Forest archaeologists continue to survey and clear acres in the project area at the rate of approximately 1,400 acres per year. The preserve completed analysis under the National Environmental Policy Act to treat 500 acres of forests.

Thinning and prescribed burning: Staff from the forest has laid out the 14,300-acre Paliza Prescribed Burn and are soliciting a contract to prepare the control line by thinning portions of it. The Jemez Pueblo, the Veteran's Corps, and the forest are working together to prepare and protect ancient archaeological sites from the future burn. Fire staff managed the unplanned, lightning caused, 1,558-acre Guacamalla and 1,707 Virgin Canyon Fires. Managed using a confinement strategy, these fires burned with low severity and helped move the forest towards desired conditions. A 739-acre prescribed fire was conducted around the community of Thompson Ridge. It reduced the existing fuel loads and reduced the fire hazard to this small community. On Virgin Mesa, the forest re-introduced fire on 129 acres through a prescribed burn. The forest completed the NEPA review on the 7,800-acre San Juan prescribed burn and is waiting for the appropriate burn window. The forest thinned 515 acres in the Los Griegos area and 134 acres in the Paliza area using contractors and in-house employees.

The preserve awarded a contract to thin 380 acres in the Cajete area. It also awarded a contract to complete forest management activities on 384 acres in the Redondo Canyon Forest Management project. The thinned material from both projects is being skidded and decked and is available for purchase.

Riparian and understory vegetation: The Respect the Rio program hosted a clean-up of the Rio Guadalupe. It also installed bollards, which are short, stout wooden posts spaced closely together, along 1.5 miles of Forest Road 376 to prevent vehicles from driving in the adjacent riparian area. Forest range staff administered 5,575 acres of rangeland to standard, and removed invasive plants by hand on 4 acres. The forest's fisheries biologist let a contract for the design of in-stream riparian structures that will improve fish habitat. Personnel on the Jemez Ranger District managed the construction of a pedestrian bridge over San Antonio Creek to the Hot Springs.

Three riparian restoration projects funded through 319 and RERI grants were implemented on the preserve. On Redondo and San Antonio Creeks, assemblages of native riparian trees and shrubs were planted in exclosures to stabilize and shade stream banks. Headcuts and incipient meander cut-offs were repaired and stabilized along the San Antonio creek, low water crossings were built, and poorly located or improperly sized culverts were removed or replaced. The projects, combined, restored approximately 117 miles of wetlands.

Monitoring and adaptive management

The Lead Partners installed 3 new and upgraded 5 existing RAWS weather stations. All are recording identical variables and streaming "live" hourly data via satellite. This was accomplished with our partner, the Western Regional Climate Center at the Desert Research Institute, Reno, NV. They installed 9 new stream flumes and 3 gauging stations on 1st, 2nd, and 3rd order streams to monitor stream discharge on treated and untreated watersheds. This brings the total flume and gauge network to 25 monitoring locations, completing the planned stream monitoring system for water quantity.

Soil erosion was monitored at numerous sites following the Las Conchas Fire to assess the new baseline soil transport and its impacts on cultural resources. In addition, funding for a post-fire LiDAR flight was successfully acquired from the National Science Foundation through our partners at the University of Arizona. The new LiDAR data will be compared to the LiDAR data taken in 2010 in the preserve portion of the project area to assess the amount and distribution of soil moved by the floods.

We acquired and deployed 14 SONDE water quality monitoring and downloading instruments in partnership with the New Mexico Environment Department. In addition, detailed water quality measurements of stream water and ground water were taken by our partners with the NM EPSCoR Program.

Finally, surveys were conducted for Jemez Mountain salamanders, a federal candidate for listing and a New Mexico State Endangered Species, and salamander habitats were characterized. Partners included The Nature Conservancy, NMDGF, USFWS, and Jemez Pueblo.

8. We would like to be able to 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?

Fiscal Year	Total number of acres treated (treatment footprint)
FY10	1,299 (SFNF) + 890 (VCNP) = **2,189**
FY10 and FY11	8,540 (SFNF) + 1,277 (VCNP) = **9,817**

9. Describe other relevant fire management activities within the project area (hazardous fuel treatments are already documented in item 7):

In the fall of 2010, fire managers from the Jemez Ranger District conducted on-going discussions with local cooperators and County representatives to discuss overarching protection goals inclusive of the private lands. On the heels of the 2010 Rio Fire, public concern over the number of human-caused fires was high. As a result, Forest Service law enforcement officers redoubled their patrols, issuing a record number of citations for unattended and improper campfires.

Late fall and smoke was again in the air with the unplanned ignition of the Virgin Canyon Fire within the Southwest Jemez Mountains project area, southwest of Jemez Springs. The fire started in a remote area and had the potential for moderate growth to the north, to the top of Virgin Mesa. Several treatments had been conducted previously within the area, and physical barriers provided a margin of safety. The fire was managed in a confinement strategy as it grew, ultimately reaching 1,707 acres for a total cost of $185,408, or $109 per acre.

The Virgin Canyon Fire catalyzed the Jemez Ranger District to expand its communication on natural fire and the responsibilities of land management agencies. Several meetings and different outreach efforts were conducted with homeowners, business owners, and politicians.

In early fiscal year 2011, as the SWJM projects spooled up, additional resources were brought in to assist with implementation. The New Mexico Energy, Minerals, and Natural Resources Department – Inmate Work Camp Program (IWC) became a valued resource on the Jemez Ranger District by participating in line preparation, burning, and thinning. The IWC program is a collaborative effort between the Southwestern Region of the Forest Service and the State of New Mexico. The IWC provides training and employment to State of New Mexico minimum security inmates to work on conservation projects while benefitting communities at risk with cost-effective implementation and restoration. The daily rate for a 12-person crew is $300 on project work or $500 on a fire. Some of the projects completed by IWC in fiscal year 2011 are 7.5 miles of road holding preparation for San Juan prescribed burn, 9 crew days of line preparation on the Vallecitos prescribed burn, and 6 acres of heavy WUI thinning on the Thompson Ridge Thinning Project. In a related collaborative effort, the Jemez Ranger District sponsored the Youth Conservation Corps, having them assist in preparing the lines for the San Juan Vallecitos prescribed burns.

The 2011 fire season brought the Las Conchas fire, the largest fire in New Mexico history, to the Jemez Ranger District, again introducing landscape fire to the communities within and around it. We held many

meetings with communities and many different levels of government, stakeholders, and cooperators, sealing the need for a more natural regime into the hearts and minds of most. Suppression costs for the Los Conchas fire were in excess of 48 million dollars. Of that, $7,856,287 was spent within the 2,563 acres of project area on the forest for a cost in excess of $3,065 per acre, including BAER efforts.

Although there was minor overlap, the Las Conchas Fire was primarily held to the CLFRP area boundary on the forest, more specifically the proposed 14,300 Paliza prescribed burn. As such, integrated treatments occurred within the Paliza project. Major fuels mitigation occurred on six National Register pueblo sites with oversight by fire resources directed by District Archeologists and Tribal Monitors for an approximate cost of $32,000. Nineteen miles of forest road were improved, encompassing the boundary of the Paliza prescribed burn. Finally, 90 acres of holding preparation was completed along Forest Roads 266 and 271 for a total estimated cost of $54,000.

The Jemez Ranger District proactively spent $133,755 in pre-suppression costs in the project area including the Valles Caldera. The resulting fire occurrence consisted of 5 human-caused fires, including Las Conchas. For the same area, there were 16 natural ignitions for a total of 3,277 acres including both the Guacamalla and Virgin Canyon fires.

A lightning event in the fall of 2011 brought the Guacamalla fire to life. The fire was in monitor status for 2 weeks as thunderstorms and significant rain fell over the area, limiting access by fire personnel. As a drying trend settled in, the Guacamalla fire again surfaced, and was subsequently managed under confinement to an existing road system over the course of 3 weeks ultimately consuming 1,558 acres for a total cost of $53,956 or $35 per acre. Integrated accomplishments of the Guacamalla fire contributed to the Paliza prescribed burn, because it split the Paliza project area in half and provided a first entry to a critical Mexican Spotted Owl Protected Activity Center. Additionally, it now provides resource protection for the community of Ponderosa's water supply, and a landscape-scale holding feature (4 mile long horizontal fuel break) for several communities until the implementation of the Paliza Rx.

During the Guacamalla fire, the Jemez Ranger District reached out to the public using media, meetings, and personal contacts. We believe that continuing with a strong outreach effort will help to ensure the success of the Southwest Jemez Mountains project since, as projects are implemented, impacts to the public will likely increase commensurately. To this end, we hosted a tour of the project area with New Mexico Air Quality Bureau personnel, resulting in identification of opportunities to streamline reporting and improving on intra-agency and public communication as a collaborative effort.

One opportunity to test previous treatments occurred within the project area in FY11. The Virgin Mesa Fire bumped into a previously masticated unit; forward fire progression was halted and re-enforced with handline construction.

Finally, Bandelier National Monument staff assisted the preserve and the forest in project preparation, prescribed burning, and monitoring. The preserve and Bandelier National Monument have initiated an interagency agreement that would create a shared fire and fuels organization. This agreement will be completed in FY12.

10. Temporary roads status

Number of miles of temporary road constructed in Fiscal Year 2011	Number of miles of temporary road decommissioned in 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 Southwest Jemez Mountains project faced several unexpected challenges that changed our planned accomplishments. Due to the Continuing Resolution, the project only had the authority to spend approximately $50,000 in carryover funds until June 2011. Project staff chose not to take unnecessary risks in last year's uncertain budget environment. As a result, several projects were delayed.

The 156,000-acre Las Conchas Fire, the largest recorded in New Mexico, was the next unexpected challenge. The fire consumed about 13% of the project area, primarily on the preserve. Besides the diversion of personnel and resources to fight the fire, the hot, dry conditions meant that no prescribed burning could take place. After the fire, a dramatic shift in weather resulted in heavy monsoons that caused extensive flooding in and off of the fire, and made conditions too wet to conduct effective prescribed burns.

Personnel changes in Forest Service staff meant the landscape-level environmental impact statement for work on National Forest System lands was delayed. Forest and regional office personnel have now begun working on the environmental impact statement. The Las Conchas Fire also impacted the preserve's planning process. It burned more than a third of the preserve. Besides the impacts on staff time, the fire changed the existing condition on a third of the preserve, requiring a revision of the environmental impact statement. The document was scheduled for completion this calendar year, but is now delayed until the spring of 2012.

The Lead Partners together are meeting or exceeding our projected accomplishments in prescribed burning, road and trail work, and water tank work. We are behind in thinning and removal of product, riparian rehabilitation, riparian exclosures, aquatic structures, and invasive plant treatments. Besides the unexpected challenges listed above, completing analysis under the National Environmental Policy Act has taken longer than expected. For instance, the forest's Invasive Species EIS is nearing completion, and would allow personnel to use herbicides to treat greater acres than can be done by hand-grubbing.

12. Planned FY 2012 accomplishment narrative:

Collaboration

The forest and the preserve will continue to work closely together to plan and implement treatments and monitoring. The preserve should complete its environmental impact statement and be ready to let contracts or enter into a stewardship agreement with industry. Together, we are investigating ways such a contract or agreement could flow seamlessly from working on the preserve to the forest, once the forest has completed its analysis under the National Environmental Policy Act.

Since the forest is starting its landscape-level environmental impact statement this fall, it plans on re-engaging its extensive list of partners and stakeholders in the preparation of the Proposed Action. It is considering hosting a series of field trips or an intensive weekend to compare and contrast effects from high-intensity wildfire against that of treatments implemented.

Restoration accomplishments

Planning: The preserve will complete its environmental impact statement and record of decision. The forest will complete (or be nearly complete) a draft environmental impact statement by the end of calendar year 2012. If it has capacity, it may complete a categorical exclusion to thin 500 to 1,000 acres in order to have project work while the EIS is finishing up.

Preparation: Forest surveyors will continue to identify and mark landline boundaries in the project area. Forest archaeologists will continue to survey and clear acres in the project area at the rate of approximately 1,400 acres per year. Forest lands staff will work on obtaining an easement on a road needed to access the project area. Road engineers will investigate sites from which to obtain material for road maintenance or decommissioning.

The preserve contracted with a Forest Service Enterprise team to complete a field reconnaissance within the Las Conchas burn area for the revision of the environmental impact statement. It also obligated funds to write a plan to rehabilitate riparian areas in the burn's footprint.

Cultural clearance and mitigation has been completed for an important road restoration plan on the preserve's road #VC05 in "Obsidian Valley," so named for its proximity and impact to a massive obsidian quarry site.

Both Lead Partners initiated cultural clearance for additional thinning in FY 11. We are working hard to have large areas surveyed and cleared in support of anticipated stewardship contracts, which could double, or triple the amount of acres thinned each year. Our ability to complete cultural clearances would be greatly diminished by another drawn-out continuing resolution. It is essential that we have a workforce in the field in the spring if we are to clear areas for treatment. We are also planning the development of a database and model that we can use to eliminate or reduce the intensity of areas for survey. Depending on how accurate the model proves to be, we could save over $500,000 in survey costs (assuming them at $40/acre).

Thinning and prescribed burning: The Lead Partners plan on completing the following thinning and prescribed burning projects:

- Paliza prescribed burn control line preparation (550 acres)
- Las Conchas meadow restoration (130 acres)
- Los Griegos thinning (100 acres)
- Los Indios thinning (160 acres via stewardship contract)
- San Antonio meadow restoration (120 acres)

- Virgin Mesa fuelbreak (270 acres)
- San Juan prescribed burn (7,800 acres)
- Paliza prescribed burn (up to 14,380 acres)
- Phase 4 Thompson Ridge prescribed burn (120 acres)
- Prescribed burning on the preserve (338 acres)
- Mechanical thinning on the preserve (up to 500 acres)

The firewood and small products program will continue to provide small-diameter wood to local residents.

Roads, Riparian and understory vegetation: Forest recreation staff will implement the East Fork Backcountry Campsite Rehabilitation project. This project will restore heavily-used camping areas to native vegetation, and re-direct the public to more appropriate camping locations. The design of in-stream structures to improve fish habitat will be completed and incorporated into the landscape EIS.

Riparian fences will be installed in 2 different canyons (San Antonio and Las Conchas) to fence out ungulates. A large, upland trick tank will be replaced with materials provided by the Rocky Mountain Elk Foundation. A pipeline damaged in the Virgin Mesa Fire will be replaced in order to direct water to upland areas.

The forest will construct a parking lot near the San Antonio Hot Springs to replace the one it closed and rehabilitated in fiscal year 2011. The Preserve will continue its riparian restoration work on the Rito de los Indios.

The Lead Partners will eradicate noxious weeds on up to 60 acres, depending on the status of the forest's Weeds Environmental Impact Statement. The preserve will continue mulching and seeding - including the collection of native seeds - in the Las Conchas Burn area.

Both agencies will continue their work on roads to control erosion. More roads and trails may be decommissioned as a result of the Las Conchas Fire. The forest will focus on maintaining or improving those roads that could be used for product removal. The preserve will work on Road #VC05 for watershed and cultural resource protection, and on Road #VC04 for watershed protection.

Monitoring and adaptive management

The forest will train its employees to monitor invasive species, the Jemez Mountain salamander, and understory vegetation. It will collect data on aquatic macroinvertebrates, fuels, and birds through contracts. The Forest Guild will start monitoring socio-economic effects. The preserve will continue its ongoing, annual monitoring and establish long-term monitoring sites in the proposed treatment areas across the project's landscape. Through its collaboration with Earthwatch, the preserve will monitor and mitigate impacts to cultural resource sites along Road #VC05 through a grant.

13. **Planned FY 2013 Accomplishments**

Performance Measure Code[12]	Unit of measure	Planned Accomplishment	Amount ($)
Acres treated annually to sustain or restore watershed function and resilience	Acres	0	
Acres of forest vegetation established	Acres	0	
Acres of forest vegetation improved	Acres	2,000	
Manage noxious weeds and invasive plants	Acre	150	
Highest priority acres treated for invasive terrestrial and aquatic species on NFS lands	Acres	0	
Acres of water or soil resources protected, maintained or improved to achieve desired watershed conditions.	Acres	1200	
Acres of lake habitat restored or enhanced	Acres	0	
Miles of stream habitat restored or enhanced	Miles	3	
Acres of terrestrial habitat restored or enhanced	Acres	8,000	
Acres of rangeland vegetation improved	Acres	7,000	
Miles of high clearance system roads receiving maintenance	Miles	100	
Miles of passenger car system roads receiving maintenance	Miles	30	
Miles of road decommissioned	Miles	100	
Miles of passenger car system roads improved	Miles	0	
Miles of high clearance system road improved	Miles	0	
Number of stream crossings constructed or reconstructed to provide for aquatic organism passage	Number	0	
Miles of system trail maintained to standard	Miles	5	
Miles of system trail improved to standard	Miles	1	

[12] 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 16.

Performance Measure Code[12]	Unit of measure	Planned Accomplishment	Amount ($)
Miles of property line marked/maintained to standard	Miles	4	
Acres of forestlands treated using timber sales	Acres	1,000	
Volume of timber sold (CCF)	CCF	11,000	
Green tons from small diameter and low value trees removed from NFS lands and made available for bio-energy production	Green tons	20,000	
Acres of hazardous fuels treated outside the wildland/urban interface (WUI) to reduce the risk of catastrophic wildland fire	Acre	4,200	
Acres of wildland/urban interface (WUI) high priority hazardous fuels treated to reduce the risk of catastrophic wildland fire	Acres	12,620	
Number of priority acres treated annually for invasive species on Federal lands	Acres	150	
Number of priority acres treated annually for native pests on Federal lands	Acres	0	

14. Planned FY 2013 accomplishment narrative:

Collaboration

By 2013, both the preserve and the forest will be moving into the implementation and monitoring phase, the ultimate goal of the collaborators. Both entities will continue to work with its partners to implement and monitor the project.

Restoration accomplishments

Planning: The preserve will be finished with its environmental impact statement. It's likely that the forest will complete its environmental impact statement sometime in calendar year 2013; the narrative that follows assumes it will be finished in the fall of 2013. This means that fewer accomplishments would occur in the forest than the preserve.

Preparation: Road crews will begin to improve and maintain roads that would be used to remove product. Heritage surveys and clearance would continue.

Thinning and prescribed burning: The forest and Jemez Pueblo will complete all or part of the 14,300-acre Paliza prescribed burn. The forest will finish up parts of the thinning work started in 2012.

The firewood and small products program will continue to provide small-diameter wood to local residents. Until the environmental impact statement is complete, the forest won't have large thinning projects underway.

The preserve will be nearing the completion of mechanical treatment in its high priority areas. It is our goal to have a stewardship contract or contracts in place by this time. Depending on cultural clearances completed we could be thinning up to 2000 acres of forest annually by 2013 or 14.

Riparian and understory vegetation: The preserve would continue riparian treatments using grants and project funds. The forest would begin work if the NEPA analysis is completed.

Monitoring and adaptive management

The Lead Partners would begin collecting data in treated areas, and get more in-depth on the socio-economic modeling.

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

In general, planned accomplishments and funding will reflect what's outlined in the work plan. The forest is currently working on its landscape-level environmental impact statement. Once it's completed, the forest intends to offer a 10-year stewardship opportunity to accelerate restoration work. Discrepancies from the work plan may occur based on actual versus planned costs, the results of cultural resource inventories that could limit the extent of treatment, environmental conditions impacting our ability to complete planned ignitions, or unforeseen administrative issues.