FOREST PLAN MONITORING

And

EVALUATION REPORT

Santa Fe National Forest

Fiscal Year 2011

FOREST SUPERVISOR'S CERTIFICATION

The Santa Fe National Forest Plan (Forest Plan) was originally approved in July of 1987. This annual monitoring and evaluation report is based on the Monitoring Plan contained in Chapter 5 of the Forest Plan and the regulatory requirements in 36 CFR 219.11(f).

I have reviewed the annual Monitoring and Evaluation Report for the Santa Fe National Forest for fiscal year 2011.

Amendments or revisions to the Forest Plan are not likely to be made as a result of this report. Instead, information from this report will be used in the planning and design of the Santa Fe Forest Planning process.

This Monitoring and Evaluation Report meets regulatory requirements in 36 CFR 219.11(f)) for completing an annual report.

Maria T. Garcia 6/29/2012

Maria T. Garcia
Forest Supervisor

Date

EXECUTIVE SUMMARY

The Forest Plan Monitoring and Evaluation Report for fiscal year 2011 is written to inform the Forest Supervisor and the public of information collected on the National Forest System lands and resources of the Santa Fe National Forest, as well as progress toward achieving the goals, objectives and desired future conditions as stated in the Santa Fe National Forest Plan. Table 1. FY 2011 Monitoring Activities catalogues and summarizes the results of monitoring performed on the Santa Fe National Forest in fiscal year 2011. Chapter 5 of the Forest Plan, titled Monitoring Plan, is located on the Forest's website at http://fs.usda.gov/santafe and can be used for comparison with the monitoring conducted in FY 2011.

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ABBREVIATIONS, ACRONYMS AND INITIALS

BLM	Bureau of Land Management
BMP	Water quality best management practices
CCF	100 cubic feet
CFRP	Collaborative Forest Restoration Program
GIS	Geographic Information System
GPS	Global Positioning System
INFRA	Infrastructure Database for integrated inventory of and financial data for its constructed features, including buildings, dams, bridges, water systems, roads, trails, developed recreation, range facilities, administrative sites, heritage sites, and other improvements.
MIS	Management Indicator Species
NEPA	National Environmental Policy Act
NRIS	Natural Resource Information System
RD	Ranger District Office
RO	Southwestern Regional Office
SHPO	State Historic Preservation Officer
SO	Forest Supervisor's Office
TAG	Santa Fe Watershed Technical Advisory Group comprised of independent scientists and researchers
TES	Endangered Species Act listed/proposed Threatened & Endangered, and Forest Service Sensitive wildlife and plant species
TIM	Timber Information Manager
WFRP	Wildlife, Fish, and Rare Plants staff

SECTION 1 – PURPOSE AND RELEVANCE

The purpose of this annual monitoring report is to inform the Forest Supervisor and the public of the progress toward achieving the desired conditions, goals, objectives, and standards and guidelines of the Santa Fe National Forest Plan. Monitoring data gathered at the Forest and Ranger District levels is analyzed to determine whether management actions and practices are attaining or making progress toward attainment of Forest desired conditions, goals, and objectives, and if monitoring measures and methods are useful in making these determinations.

PROGRESS TOWARD DESIRED CONDITIONS

In FY2011 the Santa Fe National Forest continued to make progress toward achieving desired conditions in the following areas:

	FY 2011
Access Management	
Roads maintained	45.5 mi.
Roads decommissioned	11.1 mi.
Fire and Fuels	
WUI (Wildland Urban Interface) acres treated	8,086 ac.
Non-WUI acres treated	3,143 ac.
Heritage Resources	
New heritage sites inventoried	33
Acres surveyed	2947 ac.
NRHP listed and eligible sites managed	9 sites
NRHP listed and ineligible sites managed	19sites
Acres managed	15,096
Range Management	
Range vegetation improved	40,030 ac.
Invasive plants (noxious weeds) treated	297.5 ac.
Recreation	
Recreation sites maintained to standard	60
Campgrounds reconstructed	0
Trails maintained to standard	136 miles
Trails improved to standard	6 miles
PAOTS managed to standard	258,420
Wild and Scenic Rivers managed to standard	1
Wilderness maintained to standard	4
Recreation Special Use Permits maintained to standard	102

Soil and Water	
Acres of water or soil protected, maintained, or improved to achieve desired watershed conditions.	16,299 ac.

Vegetation	
Forest vegetation improved	1061 ac.
Special forest products (latillas, vigas, posts, poles)	2,200 ccf
Firewood (charge and free use)	22,830 cords
Reforestation	765 ac.
Christmas tree permits sold	5,598
Sawtimber sold	1,608 ccf

Wildlife and Fish	
Terrestrial habitat improved	6,355ac.
Aquatic/riparian (stream) habitat improved	18.6 mi.

FOREST PLAN BACKGROUND & AMENDMENTS

The Forest Plan and Final Environmental Impact Statement were first published as drafts in 1982, as finals in 1983, and then were withdrawn in order to address appeal issues regarding timber harvesting and wild and scenic rivers. Once appeal issues were resolved, these documents were approved and published in final form in July of 1987.

Preliminary Forest staff recommendations for updating the Forest Plan were developed in 1996-98 and are contained in the fiscal year 1999 Monitoring & Evaluation Report. Those recommendations are still valid, although additional amendments have been made or may be necessary to incorporate evolving agency policies and direction. Following is the list of Forest Plan amendments:

- Amendment #1- Changed timber sale schedule (8/88)
- Amendment #2- Added management direction for recommended Wild and Scenic Rivers (1/89)
- Amendment #3- Changed timber sale schedule (5/89)
- Amendment #4- Added Pajarito Peak electronic site (2/90)
- Amendment #5- Adjusted management area boundaries between area "C" and "Q" (10/92)
- Amendment #6- Incorporated Region-wide amendment for managing Mexican spotted owl habitat, northern goshawk habitat, old growth and livestock grazing (5/96)
- Amendment #7- Allowed deviation from visual quality requirements for El Cajate Mine (12/96)
- Amendment #8- Modified Management Area J direction for Gallinas Municipal Watershed (10/97)
- Amendment #9- Added new management area and associated direction for managing the East Fork of Jemez Wild and Scenic River corridor (08/02)

- Amendment #10- Added new management area and associated direction for managing the Jemez National Recreation Area (01/03)
- Amendment #11- Pecos Wild and Scenic River: new standards, guidelines, Management Plan (07/03)
- Amendment #12- Managing Special Species Habitat (12/04)

Forest Plan Revision Schedule

Revision of the Forest Plan will proceed according to the National Forest Management Act and other applicable regulations.

The Santa Fe National Forest is currently scheduled to initiate Revision in Fiscal Year 2014.

Section 2 – Data Collection and Analysis

Monitoring for the Santa Fe National Forest occurs for different purposes and at different scales. It is important for the reader to understand that many different methods of data collection occur, because this has a direct effect on how that information is conveyed, analyzed, and what it can tell us about Forest land and resource conditions.

Types of Monitoring & Data Collection

There are four primary types of monitoring and data collection that are considered when monitoring under the Forest Plan. Often times, all four types of data are collected to help us plan and understand the impacts of management actions for a specific resource. The four monitoring types include the following:

Implementation Monitoring: Considers information and measurements to determine if projects and plans are implemented as designed. Most implementation monitoring occurs at the project level, and includes general information about the final results of the project.

Effectiveness Monitoring: Tells us whether or not plans, projects, or activities have results that help meet stated goals and objectives. Effectiveness monitoring is one of the key principles behind adaptive management, and is focused on the 'on-the-ground' result of a specific action. Effectiveness monitoring is the primary monitoring type used in this report.

Validation Monitoring: Helps determine if the initial data, assumptions, and parameters used in the development of the plan are correct, or if there is a better way to meet established Goals and Objectives and Desired Conditions.

Resource Condition Monitoring: Provides information that assists in the determination of existing social, ecological, and economic resource conditions and trends.

In addition to the four types of data collected, there are also two scales that can be distinguished at which data collection occurs.

Project-level Monitoring: Much of the monitoring on for the Santa Fe National Forest completed is specifically focused on project implementation. This type of monitoring often focuses on answering questions such as,

- "Has the project been completed to established standards?"
- "Have the objectives of the project been met?"
- "Was the project effective toward meeting established resource and management goals?"
- "What was the project cost?"

Much of the monitoring data is collected on a project-by-project basis. As a result, it can be difficult to extrapolate to the Forest Plan level and answer questions regarding progress toward achievement of Forest Plan desired conditions and the Forest's contribution toward achieving applicable outcomes of the Forest Service national strategic plan (36 CFR 219.12(f)(2)(i)(ii)).

Resource Monitoring: Resource monitoring is not necessarily project-based and commonly occurs at a scale much larger than the project level. However, it may include data collection in an area as small as a short stream segment to data collection for a specific resource that occurs at a landscape or watershed scale. Inventories are a common type of resource monitoring.

These monitoring types and scales are all essential for us to understand the impacts of management activities, projects, and actions taken. Furthermore, they are essential for providing the basic understandings that enable us to work with the public to address management concerns and progress toward the agency's mission of social, economic, and ecological sustainability.

Geographical Information Systems

During fiscal year 2011, the Santa Fe National Forest Resource Information Group continued to build and update the Geographic Information System (GIS) databases and associated tabular databases for inventory and monitoring. GIS data for heritage resources, vegetation treatments, vegetation cover types and inventory plots, invasive species, fire history, roads, trails, wilderness use, dispersed and developed recreation, range allotments/pastures and improvements, and sensitive species were updated generally on a project-by-project basis or periodically.

For each of these layers, the Forest is continuously working to reduce locational error in its GIS data by incorporating GPS data and using the most current digital orthophotography available to update the data accordingly for increased precision and accuracy. The Forest received digital resource photography flown in 2010 at a scale of 15840 and orthorectified those in the Southwest Jemez Landscape Restoration CFLRP Project Area. Additionally, the Forest continues to maintain our data to meet regional and national data dictionary standards.

In February 2011 the Forest migrated all data from local servers to the Data Center and migrated corporate Forest data into ArcSDE at the Data Center.

The NRM INFRA database continued to be updated and linked with existing GIS databases including roads, trails, developed recreation sites, administrative sites, and range features. Inventory continued on deferred maintenance inspections and costs for those items listed in the previous sentence plus buildings, dams, water, waste water, bridges, major culverts, and archaeological sites.

Appendix 1 provides a current list of GIS layers.

TABLES 1 - FY 2011 MONITORING ACTIVITIES

Table1 one displays the monitoring activities the Santa Fe National Forest performed in FY2011. Monitoring requirements can be found in the Santa Fe National Forest Plan in the Monitoring Plan Section, beginning on Page 176. A copy of the Forest Plan and monitoring reports from previous years are located online at http://fs.usda.gov/santafe under "Land & Resources Management" and then under "Planning".

The following list of resource-specific questions was used in identifying items in Tables 1. Not all resource areas had monitoring activities responsive to the questions.

1. **Air Quality**
   - Was air quality of the Class I air sheds being maintained in FY 2011?
2. **Fire-Fuels**
   - Are fuel treatments (mechanical and burning) effective?
   - How many acres of hazardous fuels reduction activities within the Wildland-Urban Interface and other high risk areas were accomplished in FY 2011?
   - How many acres of wildland fire use were used to mimic natural processes, maintain/improve vegetative conditions, and/or restore natural processes and functions to ecosystems in FY 2011?
3. **Heritage**
   - How many acres of surveys and clearances were accomplished in FY 2011?
   - Are project avoidance or mitigation measures being followed and effective at protecting heritage resources?
   - Are heritage resources being affected in non-project areas and if so, for what reasons?
4. **Insect & Disease**
   - How many acres of survey for insect and disease infestations were accomplished in FY 2011?
   - Are insect and disease populations compatible with objectives for restoring or maintaining healthy forest conditions?
5. **Law Enforcement**
   - How many and what kinds of illegal activities cases were handled in FY 2011?
6. **Minerals**
   - How many and of what kind of mining activities and operations were active on the Forest in FY 2011?
   - Were all mining operations in compliance with their plans of operation?
   - Are minerals and energy (oil and gas) exploration and development project mitigation measures and lease stipulations effective and being followed?
   - Where applicable, are reclamation plans for staged reclamation and completed mining operations being met?
7. **Facilities**
   - Were Forest administrative facilities maintained to appropriate health and safety standards in FY 2011?
   - How many miles of road have been closed or decommissioned? Is decommissioning effective?

- Are closures and decommissioning effective in preventing motorized access?

8. **Range**
   - How many acres of noxious or non-native invasive species were inventoried and how many acres were treated in FY 2011?
   - How many allotments / acres were administered in compliance with AMPs in FY 2011?
   - How many allotments / acres were put under new AMPs in FY 2011?
9. **Recreation**
   - Did potable drinking water sources provided by the Forest meet water quality standards in FY 2011?
   - Are Forest recreation sites and facilities, inc. trails, meeting health, safety, accessibility, and maintenance requirements and achieving resource / social objectives?
   - How many illegal motorized entries into wilderness areas occurred in FY 2011?
   - How many miles of trails were maintained to standard in FY 2011?
10. **Soil & Water**
   - To what extent did Forest management activities affect water quality / quantity, and aquatic, riparian, and wetland ecosystems in FY 2011?
   - How many miles of stream aquatic / riparian treatments, including the addition woody debris, were accomplished in FY 2011?
   - Are project mitigation measures, inc. BMPs being followed and effective at protecting soil / water resources?
   - Are the effects of Forest management, including prescriptions, resulting in significant changes in land productivity?
11. **Forestry**
   - How many acres of timber management (thinnings, harvest, etc) were accomplished in FY 2011?
   - How many acres of reforestation occurred in FY 2011 and are harvested lands being adequately restocked within five years?
   - Are forestry practices maintaining or restoring natural forest types, and encouraging healthier, more resilient and sustainable forest types?
   - How many acres of vegetative communities were treated to move them towards their desired condition in FY 2011?
12. **Volunteer Programs**
   - How many and what kinds of volunteer programs took place on the Forest in FY 2011?
13. **Wildlife**

   How many acres are providing for the conservation of and moving toward desired habitat conditions for:
   - FS sensitive species?
   - T&E species?
   - MIS?
   - neo-tropical migratory birds?

TABLE 1. FY 2011 MONITORING ACTIVITIES REQUIRED BY THE FOREST PLAN

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Access Management				
Site closure	Access negative impact from forest users to site to Nogales cliff dwelling	Cuba	SO	Project based
Road condition	Assess condition of 13 miles of Level 2 and 3 roads.	Forest-wide	RD and SO Files	Annually (list changes)
Road Condition	FR 448 Road Maintenance 11miles	Coyote	SO Engineering Files	Project-based
Road condition	FR 96, FR 95 conditions monitoring	Cuba	RD	Project based
Road condition	La Jara roads conditions and fuel wood area conditions	Cuba	Informal Monitoring	Project based
Special use administration	FR 267, 7D evaluation for access	Cuba	RD	Project based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Air Quality & Climate				
Class I air quality	Visibility monitoring for the San Pedro Parks Wilderness	Cuba/Coyote	http://vista.cira.colostate.edu/views/Web/Sitebrowser/Sitebrowser.aspx?SiteID=35	Weekly
Precipitation	SNOTEL snow pack measurement	Cuba, Pecos/Las Vegas	http://www.wcc.nrcs.usda.gov/snotel/snotel.pl?sitenum=922&state=nm	Daily 24/7
Precipitation	Measuring snow pack; water content	Española, Pecos/Las Vegas	NRCS: Lakewood, CO and Albuquerque offices	Winter months per USGS guidelines
Prescribed burn air quality	Smoke monitoring (primarily through visual assessments) for all prescribed, broadcast, and pile burning	Forest-wide per project	RD Fire project files	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Fire & Fuels				
Fire Effects Monitoring	Diegito Fire	Coyote	RD Fire Files	Project Based
Fire Effects Monitoring	Graves Fire	Coyote	RD Fire Files	Project Based
Fire Effects Monitoring	Monument Canyon NRA	Jemez	Bandelier NM	Seasonally
Fire Effects Monitoring	Guacamalla Fire, 1550 acres	Jemez	RD Fire project files, FACTS	Project-based
Fire Effects Monitoring	Stand Exam Data San Juan RX Burn	Jemez	NPS Bandalier	Project-based
Fire Effects Monitoring	Research and fuels monitoring for CFRP at Monument Canyon	Jemez	University of Arizona, Tucson	Project-based
Fuel condition assessments	Fuel moistures (dead and live)	Forest-wide	SO and RO, Fire files	Seasonally, selected locations
Fuel condition assessments	Fuels moisture sampling for fire severity funding and prior to Prescribed burning.	Forest wide	RO, Fire files	Project-based
Fuel condition assessments	RAWS sampling (temp, RH, wind speed/direction, fuel moistures), fuel moisture	Coyote, Cuba, Española, Jemez	SO, Dispatch	Daily during fire season
Fuel condition assessments	Fuel moisture sampling prior to Santa Fe Watershed prescribed burns	Española	RD, Project files	Projet-based
Fuel condition assessments	Energy Release Components (WIMS data)	Jemez	RAWS Station	Annually
Fuels condition assessments	Jemez Ranger District fuels moisture sample collections to monitor seasonal trends and justify Fire Severity funding	Jemez	RD Fire files	1-2 times/week different sites Mar – Oct
Fuels treatment	Acres treated – measure for both mechanical and prescribed burn treatments and according to WUI or non-WUI areas	Forest-wide	NFPORS/FACTS	Annually
Fuels treatment	Gallina WUI Phase I prescribed burn treatment (346 acres)	Coyote	RD Fire Files	Project Based
Fuels treatment	Mesa Camino prescribed burning treatment (~1200 acres)	Coyote	RD Fire Files	Project Based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Fire & Fuels				
Fuels treatment	Chaparral, 566 acres visually monitored for burning	Cuba	Informal Monitoring	Project-based
Fuels treatment	Implementation monitoring of thinning around southern end of Girl Scout Camp (250 acres).	Cuba	RD-Fuels files	Project-based
Fuels treatment	Implementation monitoring (visual and photo documentation) for Chaparral WUI prescribed burn and mechanical treatment project (Middle Fork, Matt Reidy & O'Neill, - 1,500 acres)	Cuba	RD, Fire files	Project-based
Fuels treatment	Implementation monitoring Tusas Chaparral, 52 acres thinned and slash lopped/scattered, 86 acres thinned and piled	Cuba	Informal Monitoring	Project-based
Fuels treatment	Visual project implementation compliance of 30 acres of mastication at La Jara WUI and fuel wood removal.	Cuba	Informal Monitoring	Project-based
Fuels treatment	Chaparral, 566 acres thinned and slash lopped/scattered	Cuba	FACTS, RO, Forest Management files	Project-based
Fuels treatment	FR 539 mechanical fuel break (70 acres) implementation and monitoring	Cuba	RD-Fuels files	Project-based
Fuels treatment	Project implementation compliance of 200 acres of mastication at Golondrino Perimeter Project.	Cuba	RD, Fire files	Project-based
Fuels treatment	Borrego Mesa Rx burning (103 acres)	Española	RD fire files	Project-based
Fuels treatment	Broadcast Burn Santa Fe Watershed (600 acres)	Española	RD fire files	Project-based
Fuels treatment	Los Posos Rx Burn (110 acres)	Española	RD Files	Project-based
Fuel Treatment	Effectiveness of past fuels treatment throughout Las Conchas Fire	Jemez, Espanola	RO Files	Project Based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Fire & Fuels				
Fuels Treatment	Guacamalla Fire (Resource Benefit Acres) (1,558 acres)	Jemez	SO Files	Project Based
Fuels treatment	Visual monitoring of Thompson Ridge prescribed burn (739 acres)	Jemez	FACTS	Project-based
Fuels treatment	Begoso prescribed burn implementation monitoring - 500 acres	Pecos/Las Vegas	FACTS, Burn files	Project-based
Fuels treatment	Implementation monitoring of La Cueva fuel break thinning – (164 acres) (SPS4 funded)	Pecos/Las Vegas	FACTS, RO Forest Management files	Project-based
Fuels treatment	Burn condition and implementation monitoring for Laguna Ortiz natural fire use for resource benefit (760 acres)	Pecos/Las Vegas	RD, Burn files	Project-based
Fuels Treatment	Sebadilla monitoring of previous year prescribed burn to evaluate need for re-entry	Pecos/Las Vegas	Informal monitoring	Project-based
Fuels treatment	Implementation monitoring for Southwest Barbero prescribed burn - 600 acres	Pecos/Las Vegas	RD, Burn files	Project-based
Fuels treatment	Implementation monitoring for Begoso prescribed burn - 500 acres	Pecos/Las Vegas	FACTS, Burn files	Project-based
Fuels treatment	Implementation monitoring (NMSU) for FY2008 Walker Flats prescribed burn	Pecos/Las Vegas	New Mexico State University, Watershed Program	Project-based
Prevention	WUI analysis; prioritization of WUI areas	Forest-wide	SO-Fire files	Annually
Prevention	Fire Education and Prevention at Coronado and Abiquiu Schools	Coyote	RD Fire Files	Bi-annually
Prevention	Rancho de Chaparral Girl Scout Camp and Deer Lake Estates WUI defensible space monitoring	Cuba	RD-Fire files & NM Forestry Dept Bernalillo District-files	Twice a year, Annual Meeting
Prevention	Monitoring of human caused fires over 10 years to determine the effectiveness of fire prevention program	Pecos/Las Vegas	RD, Prevention files	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Fire & Fuels				
Prevention	WUI defensible space fire hazard monitoring – summer home inspections	Pecos/Las Vegas	RD, Recreation files and Fire files	Annually
Prevention	Powerline inspections along the Mora/San Miguel Electric COOP lines	Pecos/Las Vegas	RD fire prevention files	annually
Prevention	Monitoring of human caused fires over 10 years to determine the effectiveness of fire prevention program	Pecos/Las Vegas	RD, Prevention files	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Heritage Resources				
Effects monitoring	Inspection of two sites located within the Grave Fire	Coyote	RD Heritage files	Fire
Effects monitoring	Heritage priority assets review of sites 06-29, 06-1230 and 06-1231	Española	RD Heritage file	Annually
Effects monitoring	Inspection of sites at Headquarters' Well prior to Caja del Rio Trail project implementation	Española	RD Heritage files	Project - based
Interpretation	Assessed Poshouinge for sign placement	Española	To be installed at site	Installation for fall 2012
Partnership	Site tours and assessments with School for Advanced Research, Office of Archaeological Studies, Museum of New Mexico, Taos Archaeological Society, Verde Valley Archaeological Society, Site Steward Foundation	Forest-wide	SO, Heritage Files	Ongoing
Partnership	Public presentation to Chimney Rock Interpretive Association on Gallina sites	SO	SO	Once
Partnership	Ancestral Trails documentation Caja del Rio with Bill Davis and Jerry Cooke	Española	SO, Heritage Files	Ongoing
Partnership	Interpretation for the Camino Real del	Española	SO, Heritage Files	Ongoing

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Heritage Resources				
	Tierra Adentro with Bureau of Land Management and National Park Service			
Partnership	East Jemez Resource Council-Cultural Resources Subcommittee	Española, Jemez	SO, Heritage Files	Ongoing
Partnership	East Jemez Resource Council-Cultural Resources Subcommittee	Española, Jemez	SO, Heritage Files	Ongoing
Partnership	Cemetery documentation with Thomas Ball	Jemez	SO, Heritage Files	Ongoing
Partnership	Ceramic workshop for Site Watch	Jemez	RD	Project-based
Partnership	Jemez Pueblo Field Trips (CFLRP)	Jemez	RD, informal	Project-based
Partnership	Site tours at Patokwa and Boletsakwa	Jemez	RD, Informal	Project-based
Project Clearances	Project clearance and site marking (15096)	Coyote, Cuba, Jemez	SO, Heritage files	Annually
Research	Grad Student (UNM) research on Polvadera Obsidian quarries (research started 2005)	Española	RD/SO Heritage files	Ongoing
Research	Village Ecodynamics Project with WSU, Crow Canyon and NPS	Española and Jemez	SO Heritage Files	Ongoing
Research	Graduate Student (UNM) research Jemez Field Houses and high altitude agriculture.	Jemez	SO, Heritage Files	Ongoing
Site condition assessment	Heritage resource inventories (2947 acres))	Forest-wide	SO, Heritage files	Annually
Site condition assessment	Total number of sites documented during cultural resources survey (357 sites)	Forest-wide	SO, Heritage Files	Project-based
Site Condition Assessment	Total number of sites monitored and inpsected for project work (6 sites)	Forest-wide	SO, Heritage Files	Project-basd
Site condition assessment	Inspection of sites in the Caja del Rio, Garcia, Rio Chama, Gallina, Jemez and Pecos/Las Vegas Site areas for the Santa Fe National Forest Site Steward program	SO	SO, Heritage Files	Ongoing

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Heritage Resources				
Site condition assessment	BAER Site Condition Assessments of 160 Sites within Las Conchas Burn Area	Jemez	SO, Heritage Files	Project-based
Site condition assessment	Fuels treatment for site protection on 9 national registered pueblo sites and > 100 small sites	Jemez	SO, Heritage files	Once
Site condition Assessment	Bear Springs Field Trip with Kewa Pueblo	Jemez	SO, Heritage Files	Project - based
Site condition assessment	Heritage resource site condition monitoring of the Hacienda, Glorieta Mesa Rock Art, La Cueva East Rock Shelter, La Cueva West Rock Shelter, Commissary Creek Rock Shelter, Glorieta Mesa Rock Shelters, Anton Chico Stone Structures, and Anton Chico Rock Shelters by Site Stewards	Pecos/Las Vegas	RD/SO-Heritage Resource files	Bi-Monthly depending on accessibility
Site condition assessment	Implementation monitoring of 1 site (the Hacienda fence) for the El Pueblo Grazing Allotment Permit Re-issuance site mitigations	Pecos/Las Vegas	RD/SO-Heritage Resource files	Project-based
Site condition assessment	Implementation monitoring of 1 site for the Barbero Allotment Southwest Pasture EQIP Pipe Line Reconstruction Project	Pecos/Las Vegas	RD/SO-Heritage Resource files	Project-based
Site condition assessment	Implementation monitoring of 1 site for the Griego Logging CFRP/Gallinas WUI Project	Pecos/Las Vegas	RD/SO-Heritage Resource files	Project-based
Site condition assessment	Implementation monitoring of 1 site for the Northridge Logging CFRP/Road 18 Project	Pecos/Las Vegas	RD/SO-Heritage Resource files	Project-based
Site condition assessment	Implementation monitoring of 1 site for the Walker Flats CFRP project	Pecos/Las Vegas	RD/SO-Heritage Resource files	Project-based
Site condition assessment	Implementation monitoring of 14 sites for the Laguna Ortiz Prescribed Burn Project	Pecos/Las Vegas	RD/SO-Heritage Resource files	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Heritage Resources				
Site condition assessment	Implementation monitoring of 3 sites for PNM Powerline Maintenance	Pecos/Las Vegas	RD/SO-Heritage Resource files	Project-based
Site condition assessment	Implementation monitoring of 3 sites for the Southeast Barbero Allotment NEC CFRP Vegetation Treatment Project	Pecos/Las Vegas	RD/SO-Heritage Resource files	Project-based
Site condition assessment	Suppression impacts monitoring of 2 sites for the Tecolote Wildfire.	Pecos/Las Vegas	RD/SO-Heritage Resource files	Project-based
Site testing	Archaeological site testing (01-775) and survey for proposed installation of culvert on FR 148	Coyote	RD Heritage files	Engineering project based
Site treatments	BAER Treatments on 60 Sites within Las Conchas Burn Area	Jemez	SO, Heritage Files	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Insect & Disease Management				
Inventory	Campgrounds surveyed for gypsy moth infestation	Forest-wide	RO and SO GIS files	Annually
Inventory	Insect/disease activity monitoring and inventory – aerial detection survey for insect damage, with aerial survey map and report	Forest-wide	RO and SO GIS files	Annually
Evaluation	Install traps for nuisance species of insects at Field Tract, Windy Bridge, Holy Ghost, Cowles Campground, Windsor, Panchuela, Jacks Creek, Iron Gate, and Admin Site in Las Vegas	Pecos/Las Vegas	Forest Health	Annually
Implementation	Corral 4 FHP 76 acres thinned and decked	Coyote	FACTS, District Files	Project-based
Implementation	Gallina WUI Ranch FHP 61 acres thinned and decked	Coyote	FACTS, District Files	Project-based
Implementation	Eureka Mesa, 75 acres thinned and firewood removed	Cuba	FACTS, RO, Forest Management files	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Insect & Disease Management				
Implementation	Los Griegos, 88 acres force account thinned, fuel wood removed	Jemez	FACTS, RO, Forest Management files	Project-based
Implementation	La Cueva Block D FHP, 50 acres thinned and slash lopped/scattered, fuel wood removed	Pecos/Las Vegas	FACTS, RO, Forest Management files	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Law Enforcement				
Access	Access to Forest Service land from road 415	Española	RD, Law Enforcement	Project-based
Compliance	Monitoring and removal of trash on Caja del Rio	Española	RD, Law Enforcement	Ongoing
Closure order	Monitoring effectiveness of shooting closure order on Caja del Rio	Española	RD, Law Enforcement files	Ongoing
Closure order	Monitoring effectiveness of closure order for gun control on Glorieta Mesa	Pecos/Las Vegas	SO, Law Enforcement files	Ongoing

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Minerals				
Mine reclamation	Surface inspection of 4 closed mines Utility Block, Cerro del Pino, South Pit, and El Cajete reclaimed mine site	Forest-wide	Cuba RD, Mineral files	Annually
Mine reclamation	Mine reclamation effectiveness and water quality monitoring: Nacimiento	Cuba	Cuba RD, Mineral files	Annually
Mine reclamation	Guaje pumice mine rehabilitation	Española	RD, Project-files	Project based
Mine reclamation	Scoria pit mine rehabilitation	Española	RD, Project-files	
Permit compliance	Monitoring/inspections of 64 O&G wells	Forest-wide	Cuba RD, Mineral files	Annually and Quarterly

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Minerals				
Saleable minerals	Rock collection site permit sales monitoring	Forest-wide	RD, Minerals files and INFRA database	Annually

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Non-Recreation Facilities				
Facilities/sites	Monitoring of vandalized toilet on Johnson Mesa,	Pecos/Las Vegas	RD, INFRA	Project-based
Infrastructure	Inspections & facility condition/maintenance surveys of 63 facilities inc. recreation and administrative sites, and water systems (Forest total 274 agency, 5 lease)	Forest-wide	INFRA database	Annually
Infrastructure	Real property inspections (includes wastewater); condition surveys for maintenance needs; Safety inspection (selected high-risk work areas)	Forest-wide	INFRA database	Annually
Infrastructure	Deadman, Redtop, Cerro Pelado, Barillas, & Encino Fire Lookout Tower inspections	Coyote , Cuba, Jemez, Pecos/Las Vegas	RD- Fire, SO-Safety files	Annually
Infrastructure	Facilities inspections for safety and conditions	Cuba	RD, SO	Annually
Infrastructure	Quarters inspections	Cuba	RD	Annually
Infrastructure	Safety modifications to administrative/Quarters propane tanks and water heaters	Jemez	INFRA	Annually
Utilities	Permit compliance, site inspection Tesuque radio communication site	Española	RD, Recreation files	Annually

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Range				
Range facilities	Deferred maintenance inventory on Jemez, Coyote, and Cuba, Española – 20% of range improvements (fences, stock tanks, corrals, and spring developments).	Coyote, Cuba, Española, Jemez	INFRA, Range files	Periodic
Range facilities	Riparian exclosure fence maintenence: Coyote RD-2, Cuba - 5, Española - 2 (Oso Vallecitos, Polvadera allots) Jemez-1	Coyote, Cuba, Española	INFRA and RD, Range files	Annually
Range facilities	Riparian exclosure fence monitoring:4 exclosures on Cuba, 1 exclosure on Española (Polvadera) and 5 exclosures on Coyote, 7 –Jemez (Rio Cebolla)	Coyote, Cuba, Española, Jemez	INFRA and RD, Range files	Annually
Range facilities	Condition inspections on fencing, stock tanks, and riparian exclosure fences	Coyote, Cuba, Jemez	INFRA and RD, Range files	100% monitored in 2011, 20% on annual basis
Range facilities	Condition inspections on well, pipeline and 10 trough replacements	Pecos/Las Vegas	INFRA and RD, Range files, NRCS EQIP	Selected sites monitored annually
Range facilities	Condition inspections on well, pipeline and 16 trough replacements	Pecos/Las Vegas	INFRA and RD, Range files, NRCS EQIP	Selected sites monitored annually
Range facilities	Condition inspections: 35 miles of fencing and 35 stock tanks	Pecos/Las Vegas	INFRA and RD, Range files	100% monitored in 2011
Range facilities	Deferred maintenance inventory and inspection of 2 allotments: fences, stock tanks, corrals, and spring developments	Pecos/Las Vegas	INFRA, Range files	Periodic
Range facilities	Water facilities: monitoring of 6 livestock wells and 30+ troughs	Pecos/Las Vegas	INFRA and RD, Range files	Annually
Range surveys	NEPA data collection & analysis for watershed, soils, wildlife, forage production-utilization, invasive plants for 1 allot	Cuba	NEPA Project files	Project-based
Vegetation sampling	Ground cover and basal cover of grasses, forbs and shrubs on San Pedro	Cuba	NMSU, FS, LJEC	Project-based
Vegetation sampling	Ground cover and basal cover of grasses, forbs and shrubs on Rio De La Casa Allotment	Pecos/Las Vegas	NMSU, FS, LJEC	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Range				
Vegetation treatments	~88 ac of sage treatment on Laguna Simon Project	Cuba	INFRA and RD, 2230 Range files	Project-based
Vegetation treatments	Piñon-Juniper thinning on Cuba Mesa ~20 acres	Cuba	INFRA and RD, 2230 Range files	Project-based
Vegetation treatments	~500 ac of thinning on Barbero allotment	Pecos/Las Vegas	INFRA and RD, 2230 Range files	Project-based
Grazing permit compliance	Unauthorized livestock monitoring	Cuba, Coyote, Española, Jemez	INFRA and RD, Range files	Annually
Grazing permit compliance	Watering systems conditions after drought: Barbero, Springs, Valle Grande, and El Pueblo	Pecos/Las Vegas	INFRA and RD,	Annually
Grazing permit compliance	Ranger District: 2011 allots Coyote: 11 allotments – 11% of 101 current permits Cuba: 11 allotments – 28% of 39 current permits Española: 5 allotments – 50% of 10 current permits Jemez: 9 allotments – 60% of 15 current permits Pecos/Las Vegas: 20 allotments – 100% of 19 current permits Total: 56 allotments - 30% of current permits Monitoring includes: pasture rotation, authorized dates, class of animal, confirmation / livestock numbers, updated brand cards and ear tags, and brand checks on livestock	Forest-wide	INFRA and RD, Range Files	Annually

Monitoring Item	Monitoring Description		Area	Data/report Location	Monitoring Frequency
Range					
Key use area condition	Ranger District	2011 allots	Forest-wide	INFRA and RD, Range files	Annually on selected allotments
	Coyote	11 (Key Areas)			
	Cuba	8			
	Española	4			
	Jemez	36			
	Pecos/Las Vegas	20			
	Monitoring of pre- and post-grazing utilization stubble height of forage species				
Grazing permit compliance	Ranger District	2011 allots	Forest-wide	INFRA and RD, Range files	Annually on selected allotments
	Coyote	21 Renewals			
	Cuba	2 Renewals			
	Española	0 Renewals			
	Jemez	1 Renewal			
	Pecos/Las Vegas	0 Renewals			
	Renewal of expired term grazing permits				
Range condition	Ranger District	2011 allots	Forest-wide	INFRA database and RD Range files	Annually
	Coyote	1			
	Cuba	2			
	Española	4			
	Jemez	5			
	Pecos/Las Vegas	0			

Monitoring Item	Monitoring Description		Area	Data/report Location	Monitoring Frequency
Range					
	Ranger District	2011 allots	Forest-wide		
	Coyote	11			
	Cuba	15			
	Española	3			
	Jemez	9			
	Pecos/Las Vegas	10			
Range readiness	Range soil and vegetative readiness			INFRA, RD Range Files	Annually on selected allotments

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Recreation				
Facilities/sites	Compliance with NMED water systems for developed campgrounds	Forest-wide	Contracted, files in engineering and at districts	Ongoing, summer season
Facilities/sites	Condition inspection of recreation sites before opening	Forest-wide	RD Recreation files	Annually
Facilities/sites	Dispersed campsite condition maintenance and monitoring (i.e., litter removal) (non-motorized)	Forest-wide	RD Recreation files	Summer season
Facilities/sites	Hazard tree monitoring at developed sites and facilities	Forest-wide	RD Recreation files (work logs)	Ongoing, summer season
Facilities/sites	Real property inventories	Forest-wide	RD Recreation files	Project-based
Facilities/sites	Recreation facilities condition inventory and inspection monitoring of Rio Chama, Jemez and Pecos Wild & Scenic Rivers	Forest-wide	INFRA	Annually 10%/year
Facilities/site	Recreation site (7 sites) pre-season condition monitoring and facility condition monitoring	Española	RD, Recreation files	Project-based
Facilities/sites	Recreation site rule compliance monitoring	Forest-wide	Informal Monitoring	Ongoing, June - October
Facilities/sites	Site monitoring for Forest-wide Recreation Facility Improvements	Forest-wide	Informal Monitoring	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Recreation				
Facilities/sites	Campsite exclosure fencing for Clear Creek picnic area and campground and Rio de Las Vacas Campground.	Cuba	SO	Project based
Facilities/sites	Water systems monitoring for total coliform – Clear Creek and Rio de las Vacas campgrounds	Cuba	RD, Recreation files	Monthly
Facilities/site	Recreation site (7 sites) pre-season condition monitoring and facility condition monitoring	Española	RD, Recreation files	Project-based
Facilities/sites	Rio Guadalupe watershed dispersed site inventory and use	Jemez	RD Recreation files	Ongoing, summer season
Facilities/sites	Respect the Rio public education for improvements of riparian and dispersed camping areas	Pecos/Las Vegas	RD	Ongoing
Rec. Demo	Fee collection receipts documenting number of campers, dates of visit, and vehicle.	Forest-wide	RD Recreation files	Ongoing
Trails	Condition inventory and assessment: trailheads, trail tread, drainage (culverts, water bars), and other infrastructure (10% of RD annually)	Forest-wide	INFRA, RD Recreation files	Annually
Trails	Trail assessment and trail infrastructure condition monitoring	Forest-wide	INFRA	20% annually
Trails	Trail condition surveys and assessments	Forest-wide	RD Recreation files (work logs, photos)	Ongoing, summer season
Trails	Route identification, GPS location, planning and monitoring of trails proposed as part of Travel Management	Forest-wide	RD, Recreation files	Project-based
Trails	Canones Creek National Recreation Trail – Project Implementation Monitoring	Coyote	RD Recreation Files	Project Based
Trails	Continental Divide National Scenic Trail inventory and reconnaissance	Coyote, Cuba	Informal Monitoring	Annually
Trails	Trail reconnaissance on San Jose Trail	Cuba	Informal Monitoring	Select trails annually
Trails	Las Conchas trail monitoring and reconstruction of rehabbed trails – 50 miles	Española	RD Recreation Files	Project Based
Trails	Trail and trailhead monitoring for safety, clearing, and meeting standards	Española	RD, Recreation files	Annually
Trails	Volunteer work clearing on 150 miles of trail	Española	RD Recreation Files	Project Based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Recreation				
Trails	Dome Wilderness Service Projects and Public Education (Wilderness Ethics, LNT)	Jemez		Project-based
Trails	Jemez National Recreation Area trail condition monitoring	Jemez	Jemez	Annually
Trails	Peralta Canyon Trailhead improvement project monitoring	Jemez	RD, Recreation files	Project-based
Trails	Monitored trail through ARRA contractors through SCA	Pecos/Las Vegas	RD, Recreation	one season
Trails	TRAC survey on the Blue Bell Trail	Pecos/Las Vegas	RD, Recreation	Project-based
Motorized Roads & Trails (TMR)	Monitor and evaluate trails as part of the proposed action for TMR	Pecos/Las Vegas	RD	Ongoing
Visitor use	Implement Wilderness Education Plan for Pecos, San Pedro Parks, Chama River Canyon, and Dome wilderness areas	Forest-wide	Informal Monitoring, SO files	Project-based
Visitor use	Uniformed Forest Service Wilderness Ranger patrolling Wilderness for interpretation and compliance	Forest-wide	RD Recreation files	Summer season (June – August)
Visitor use	Monitored dispersed campsite inventory for Travel Management (presence, impact on resources, location assessment)	Forest-wide	RD, Recreation files	Annually
Visitor use	Rio Chama overnight rafting permits - monitoring for visitor use	Coyote	BLM (Taos)	Ongoing
Visitor use	Uniformed Forest Service personnel stationed at the Cuba Visitor's Center for interpretation	Cuba	Informal Monitoring	As needed
Visitor use	Visitor use monitoring in San Pedro Parks and Pecos Wilderness	Cuba, Pecos/Las Vegas	RD, Recreation files	Annually
Visitor use	Respect the Rio program dispersed campsite use and visitor satisfaction including vehicles, number of people, distance from stream	Jemez	Respect the Rio annual report	Annually
Visitor use	Forest Service sponsored Fire P revention education booth at public events (i.e., clean-up days, Earth Day) and schools	Pecos/Las Vegas	RD, Wildlife files	Annually
Visitor use	Respect the Rio baseline data and visitor encounters in dispersed campsites	Pecos/Las Vegas	RD	First year

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Recreation				
Visitor use	Annual volunteer clean-up days in high recreation use areas	Pecos/Las Vegas	RD, Recreation files	Annually
Wild and Scenic River	Monitored use for dispersed campsites	Pecos/Las Vegas	RD Recreation Files	Ongoing
Wilderness use	Track motorized and mechanized approvals in Wilderness	Forest-wide	Wild INFRA	Annually
Wilderness use	Encounter monitoring of visitor use in the Wilderness	Forest-wide	RD Recreation files	Summer season (June – August)
Wilderness use	Inventory and monitoring of invasive weed species, locations, and acreage in the Wilderness	Forest-wide	INFRA Range	Ongoing
Wilderness	Wilderness boundary monitoring and evaluation for San Pedro Parks	Cuba	SO	Project based
Wilderness use	Illegal OHV use in wilderness and non-wilderness areas, and impacts from use in designated areas	Española and Pecos/Las Vegas	RD Recreation files	Approx. twice a month
Wilderness use	Wilderness campsite monitoring: fire rings, vegetation impacts, trash, compliance with leave no trace principles	Española and Pecos/Las Vegas	RD Recreation files	Ongoing, summer season

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Recreation Special Uses				
Special uses	Post permit site rehabilitation and monitoring (e.g., new trail obliteration) after Rainbow Family Gathering	Cuba	RD Rainbow Family Gathering Files	Project-based
Special uses	San Miguel water system monitoring	Cuba	Rd	Project based
Special uses	Water systems permit monitoring Esquelita	Cuba	RD Recreation Files	Annually
Special uses	San Miguel water system monitoring	Cuba	Rd	Project based
Special uses	Power line inspection for Special Use Permit administration	Pecos/Las Vegas	RD Recreation files	Annually

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Recreation Special Uses				
Special uses	Recreation residence permit (110 permits) renewal and compliance, including site condition and fire prevention inspections at Gallinas, Grass Mountain, Holy Ghost, Cowles Leases, and Winsor summer home areas	Pecos/Las Vegas	RD Recreation files	Annually
Special uses	Archeological and Wildlife monitoring for Outfitter-guide Term Special Use Permit	Pecos/Las Vegas	RD, SUP files	Ongoing
Special uses	Special events and non-commercial group use permit compliance and effects monitoring (e.g. National Guard training, Sierra club hiking groups, Endurance rides, School group visitors, etc.)	Pecos/Las Vegas	RD Recreation files	By event

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Soil & Water				
Riparian condition	Stream impairment and vehicle exclusion monitoring along Polvadera Creek as part of the riparian improvement project	Española	RD, 2009 WFRP Report	Project-based
Riparian condition	Riparian condition assessments for waterways:. Jemez: Rio Cebolla, San Antonio. Didn't occur on Cuba RD in FY2011, will resume in FY2012.	Jemez	RD	Annually for select waterways
Riparian condition	Rapid Stream and Riparian Assessment (RSRA) for the East Fork, San Antonio, Vallecitos, and Cebolla Rivers (177 points)	Jemez	SO files, GIS	Project-based, SWJM Project
Riparian condition	Riparian condition assessments: Rosilla and Capulin allotments	Pecos/Las Vegas	Project Record	Project-driven
Soil condition	Soil condition assessments on Laguna Simon, Sagebrush, and Pinon-Juniper Projects	Cuba	RD Range files and specific project records	Project-driven
Soil condition	Soil condition assessments on San Pedro, allotments	Cuba	RD Range files	Project-driven
Soil condition	Radio nucleide sampling along the Buckman Diversion Project (Rio Grande)	Española	RD, Project files	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Soil & Water				
Soil condition	Santa Fe watershed soil erosion monitoring (part of paired watershed study)	Española	RD Watershed files	Project driven, SFWS TAG
Watershed Condition	BMP effectiveness Gallinas/Tecolote Watersheds	Pecos/Las Vegas	RD files	Project-driven
Water quality	E. coli, total coliform and nitrate/nitrite sampling of 21 recreation sites; year-long sampling of Coyote RD administrative and Vista Linda site.	Forest-wide	SO Engineering, NM Environment Department	Prior to opening & monthly
Water quality	Fenton Hill administrative site	Jemez	Los Alamos National Laboratory	Monthly
Water quality	Water quality measurements taken throughout the Southwest Jemez Mountains CFLRP project area.	Jemez	SO, Watershed files	Monthly May – October, SWJM Projgect
Water quality	Water quality sampling study in the Santa Fe and Pecos Rivers to measure water quality parameters	Española, Pecos/Las Vegas	NM Environment Department (CWA 319 Grant)	Monthly
Water quality	Las Vegas Municipal Watershed water intake	Pecos/Las Vegas	City of Las Vegas Water Treatment Plant	Monthly
Water quantity	Stream flow and water quality data: Rio Grande, Chama and Jemez Rivers, Mora, Gallinas and Pecos	Coyote, Española, Jemez, Pecos/Las Vegas	http://waterdata.usgs.gov/nm/nwis/nwis	Continuous
Water quantity	Stream flow data taken at Paliza for the Southwest Jemez Mountains CFLRP project.	Jemez	Valles Caldera National Preserve	Project-based, SWJM Project

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Vegetation Management				
Invasive Species	Monitored and treated 60 acres of noxious weeds	Coyote	GIS/Range Files	Annually
Invasive species	Inventoried, monitored, and mapped ~75 acres of new populations of invasive Russian Knapweed, Bull Thistle, Scotch Thistle, Musk Thistle, Toad Flax, Cheat Grass, Canadian Thistle, Spotted Knapweed, and Diffuse Knapweed.	Cuba, Jemez	RD project files, GIS Corporate database	Annually
Invasive	Mechanical control and implementation monitoring of	Pecos/Las Vegas	RD Range files, INFRA	Annually

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Vegetation Management				
species	scotch thistle			
Invasive species	Invasive weed population inventory on allotments on the ranger district	Pecos/Las Vegas	RD Range files	Annually
Reforestation evaluation	Certification of natural aspen regeneration on 604 acres of the Viveash Fire	Pecos/Las Vegas	FACTS, RD files	Project-based
Special forest products	Collection permit compliance- firewood, Christmas trees, boughs, wildings, seed cones, vigas, latillas, and fence posts	Forest-wide	TIM, INFRA	Ongoing
Special forest products	Collection permits - product price, terms of collection and products to be collected, dates of collection, date of issuance, issuing officer	Forest-wide	INFRA database	Annually, ongoing
Special forest products	Removed and sold fuel wood, posts, poles, miscellaneous small round wood, Christmas trees, conifer cones, wildings and other small diameter products	Forest-wide	Timber Sale Accounting database	Annually
Special forest products	Christmas tree permits: 49 trees	Coyote	TIM	Annually
Special forest products	Commercial Christmas tree permits: 3 permits/ 70 trees	Coyote	TIM	Annually
Special forest products	Firewood permits: 1,065 cords	Coyote	PTSAR database, Timber Sale Account database, INFRA	Annually
Special forest products	Free-Use Firewood permits: 42 cords	Coyote	PTSAR database, Timber Sale Account database, INFRA	Annually
Special forest products	Monitored vegetative treatments in Mesa Poleo WUI Camino Corral	Coyote	RD, Project files	Project-based
Special forest products	Christmas tree permits: 258 trees	Cuba	TIM	Annually
Special forest products	Firewood permits: 1,644 cords	Cuba	PTSAR database, Timber Sale Account database, INFRA	Annually
Special forest products	Fuel wood area monitoring Tanques	Cuba	Informal Monitoring	Project based
Special forest products	Christmas tree permits: 919 trees	Española	TIM	Annually
Special forest products	Firewood permits: 7,649 cords	Española	PTSAR database, Timber Sale Account database, INFRA	Annually
Special forest products	Christmas tree permits: 2,062 trees	Jemez	TIM	Annually

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Vegetation Management				
Special forest products	Firewood permits: 5,370 cords	Jemez	PTSAR database, Timber Sale Account database, INFRA	Annually
Special forest products	CFRP project implementation monitoring: Barela/Gallinas, Walker Flats, Barbero/NEC, Griegos Logging	Pecos/Las Vegas	RD project files	Project-based
Special forest products	Christmas tree permits: 1,888 trees	Pecos/Las Vegas	TIM	Annually
Special forest products	Commercial Christmas tree permits: 14 permits/ 352 trees	Pecos/Las Vegas	TIM	Annually
Special forest products	Firewood permits: 7,056 cords	Pecos/Las Vegas	PTSAR database, Timber Sale Account database, INFRA	Annually
Special forest products	Free-Use Firewood permits: 26 cords	Pecos/Las Vegas	PTSAR database, Timber Sale Account database, INFRA	Annually
Timber	Forest Timber Program Review	Forest-wide	SO	Every other year
Timber	Total timber products removed	Forest-wide	Timber Sale Accounting database	Annually
Vegetation treatments	Corral 4 Cut Skid & Deck 76 ac	Coyote	FACTS, District Files	Project-based
Vegetation treatments	Gallina WUI Ranch thinning - 61 acres	Coyote	FACTS, District Files	Project-based
Vegetation treatments	Gallina WUI thinning - 156 acres	Coyote	FACTS, District Files	Project-based
Vegetation treatments	Mesa Poleo WUI Thinning/Slashing -189 acres	Coyote	FACTS, District Files	Project-based
Vegetation treatments	Cuba Mesa pinon/juniper thinning – 186 acres	Cuba	FACTS, GIS	Project based
Vegetation treatments	Eureka Mesa pine thinning – 75 acres	Cuba	FACTS, GIS	Project based
Vegetation treatments	Chaparral pine thinning – 52 acres	Cuba	FACTS, GIS	Project based
Vegetation treatments	La Jara pine thinning – 53 acres	Cuba	FACTS, GIS	Project based
Vegetation treatments	Tanques pinon/juniper thinning – 85 acres	Cuba	FACTS, GIS	Project based
Vegetation treatments	Laguna Simon Project- Laguna Seca Pinon/Juniper Unit Thinning – 78 acres	Cuba	FACTS, GIS	Project based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Vegetation Management				
Vegetation treatments	Los Griegos CFLR Thinning - 515 acres	Jemez	FACTS, GIS	Project based
Vegetation treatments	Paliza CFLR Thinning - 134 acres	Jemez	FACTS, GIS	Project based
Vegetation treatments	Borrego Thinning - 107 acres	Española	FACTS, GIS	Project based
Vegetation treatments	Santa Fe Watershed Thinning - 12 acres	Española	FACTS, GIS	Project based
Vegetation treatments	One CFRP grant award: Aspen Forest Products/Borrego	Española	RD project file	Project - based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Volunteer and Education Programs				
Environmental education	Classroom education to elementary, middle and high schools	Supervisor's Office	SO Respect the Rio files	Project-based - Respect the Rio
Environmental education	Interpretive programs at developed campgrounds, public contacts at dispersed campsites, trails, and recreation sites - 4738 people	Supervisor's Office	SO Respect the Rio files	Project-based - Respect the Rio
Environmental education	Coronado Schools outdoor education and environmental interpretation visit	Coyote	RD Recreation Files	Annual
Environmental education	Tribal Youth Environmental Science Camp – Eight Northern Pueblos	Coyote	Civil Rights Files	Annual
Environmental education	Classroom fire prevention education visits to elementary, middle schools, and high schools and at events such as Earth Day and Clean-up days	Cuba	RD	Project-based
Environmental education	Classroom fire prevention education visits to elementary, middle schools, and high schools	Cuba, Pecos/Las Vegas	RD	Project-based
Environmental education	Respect the Rio Student participants orientation	Pecos/Las Vegas	RD files	Project-based
Special events	New Mexico Trout Annual Guadalupe River Clean-up Event	Jemez Ranger District	SO Respect the Rio files	Annually

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Volunteer and Education Programs				
Special events	Upper Pecos Watershed Association Annual Clean-up Event in conjunction with the State Free Fishing Day	Pecos/Las Vegas	Pecos RD files	Annually
Special events	YCC education sessions	Pecos/Las Vegas	RD files	Annually
Visitor use	Volunteer clean-up days in Rio del Oso, Caja del Rio, and Rio Chama	Española	RD, Recreation files	Annually
Visitor use	Volunteer day on Quemazon	Española	RD, Recreation files	Project-based
Visitor Use	Volunteer days on Knapp	Española	RD Recreation files	Project based
Volunteers	Volunteer activities forest-wide can be found in the new Volunteer Database located at: http://apps.fs.fed.us/syvp/welcome.do	Forest-wide	Database	Annually
Volunteer activities	Volunteer activities including trail maintenance activities and trash collection	Pecos/Las Vegas	RD files	Project-based
Volunteer activities	Volunteer trail reconnaissance and Windfall Counts on district trails	Cuba	RD Recreation files	Project-based
Volunteer activities	Volunteer activities including fence maintenance and bollard placement to prevent vehicular damage to streambanks	Jemez and Cuba Ranger Districts	SO Respect the Rio files	Project-based - Respect the Rio
Volunteer activities	Partnership with the Step into Cuba Alliance to promote physical activity and fitness in the community	Cuba	RD Recreation files	Ongoing
Volunteer Activities	Rio Chama Wild and Scenic River Volunteer Host	Coyote	RD Recreation Files, BLM Taos	Project-based
Volunteer activities	Campground hosts posted at campsites to maintain campgrounds and monitor fee compliance; Cuba - Rio las Vacas and Clear Creek; Pecos/Las Vegas - Jack's Creek, Field Tract, Holy Ghost	Cuba, Pecos/Las Vegas	RD Recreation files	Summer season

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Wildlife, Fish & Plants				
Aquatic Invasive Species	Monitoring for Didymo sp. (rock snot) at Holy Ghost, Winsor Creek, Panchuela Creek, and Pecos River areas	Pecos/Las Vegas	NMED	Project-based
Fisheries	San Gregorio Lake fish stocking monitoring	Cuba	Informal Monitoring	Project based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Wildlife, Fish & Plants				
Las Conchas Fire Monitoring	Field visit to 10 earthen dams to assess function following fire; all found to need cleaning of ash and silt to restore water function to wildlife; also field visit to Alamo Springs to assess function	Jemez	RD Wildlife files	
Las Conchas Fire Monitoring	Field visit to assess burn intensity in 5 MSO PACs	Jemez	RD Wildlife files (pictures)	
Las Conchas Fire Monitoring	Field visit with NMG&F to assess trick-tanks burned over in fire; at least four require replacement to restore water function to wildlife	Jemez	RD Wildlife files	
T&E / FS Sensitive Species	Rio Grande cutthroat trout population surveys	Forest-wide	SO Fisheries files	Annually
T&E / FS Sensitive Species	Verification of Gunnison's' prairie dogs in Canada Camino and Canada Fuertes	Coyote	T drive files	Project-based
T&E / FS Sensitive Species	Northern goshawk suitable habitat population surveys	Cuba	RD Wildlife files	Annually
T&E / FS Sensitive Species	Goshawk nesting sites and Elk calving area monitoring	Cuba	RD Wildlife Files	Project-based
T&E / FS Sensitive Species	Endemic Salamander Team. Worked with team to place artificial cover objects on forest lands to determine the efficacy of this type of monitoring.	Cuba, Jemez	SO files	Annual
T&E / FS Sensitive Species	Non-native fish removal from Rio Grande cutthroat trout waters	Jemez	SO Fisheries files	Annually
T&E / FS Sensitive Species	Mexican spotted owl protected activity centers - monitoring: 1,200 ac.	Jemez	RD Wildlife files	Approximately 3-6 MSO PACs monitored per year
T&E / FS Sensitive Species	Rio Cebolla brown trout monitoring and removal with NM Dept. of Game and Fish	Jemez	SO fisheries files	Annual
T&E / FS Sensitive Species	Goshawk habitat monitoring on 25acres for Barillas Lookout Project	Pecos/Las Vegas	RD Wildlife files	Project-based

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Wildlife, Fish & Plants				
T&E / FS Sensitive Species	Habitat monitoring for >37 species for Special Use Permit issuance for resource improvement projects (e.g., range, recreation, fire etc.)	Pecos/Las Vegas	RD Wildlife files	Project-based
T&E species, MIS, Sensitive Species	Habitat monitoring for CFRP Projects, Maestas, Walker Flats, Barbero, Road 18, Gallinas Municipal Watershed, Upper Pecos Roadside Thinning, Las Dispensas	Pecos/Las Vegas	RD, Wildlife files	Project based
T&E / FS Sensitive Species	Holy Ghost Ipomopsis monitoring in Holy Ghost, Indian Creek, Winsor Creek, and Panchuela Creek areas	Pecos/Las Vegas	UNM, NM State Forestry	Annual Monitoring
T&E / FS Sensitive Species	Mexican spotted owl inventory in the Gallinas Municipal Watershed,	Pecos/Las Vegas	RD Wildlife files	Project-based
Sensitive, MIS, and Non-sensitive species populations	Fish habitat monitoring prior to dredging of large Cowles ponds	Forest-wide	RD Fish files	Project-based
Sensitive, MIS, and Non-sensitive species populations	Fisheries population surveys	Cuba, Jemez	SO Fisheries files	Annually
Sensitive, MIS, and Non-sensitive species populations	Macroinvertebrate population surveys - Vallecitos Creek	Jemez	SO Fisheries files	project-based - SW Jemez Mtns CFLR project
Sensitive, MIS, and Non-sensitive species populations	Bear habitat monitoring with NMGF to assist with bear removals and relocations	Pecos/Las Vegas	RD Wildlife files	As needed basis
Sensitive, MIS, and Non-sensitive species populations	Butterfly surveys along FR 156	Pecos/Las Vegas	RD Wildlife files	Project-based (Hermit's Peak Watershed Alliance)
Sensitive, MIS, and Non-sensitive species populations	NMG&F elk, deer, population monitoring	Pecos/Las Vegas	NM Dept. of Game & Fish	Annually

Monitoring Item	Monitoring Description	Area	Data/report Location	Monitoring Frequency
Wildlife, Fish & Plants				
Sensitive, MIS, and Non-sensitive species populations	Sensitive species, Management indicator species inventory in the Barbero Allotment/Laguna Ortiz and Gallinas Piles for range/prescribed burn improvement monitoring	Pecos/Las Vegas	RD, Wildlife Files	Rocky Mountain Ecology, LLC
Wildlife habitat/use	Big horn sheep: population monitoring by NMG&F	Pecos/Las Vegas, Española	NM Dept. of Game & Fish	Annually by NM G&F
Wildlife habitat improvement	Remote camera monitoring of water development on Mesa Camino	Coyote	O Drive Wildlife Files	Project-based
Wildlife habitat improvement	Removal of old fence around meadow by National Wild Turkey Federation Volunteers	Coyote	WFRP Database 2011	Project-based
Wildlife habitat improvement	Penas Negras fisheries habitat improvement monitoring	Cuba	RD Wildlife files	Project-based
Wildlife Habitat	Peregrine Falcon habitat monitoring Eureka Mesa	Cuba	RD	Project based
Wildlife habitat improvement	Check 8 trick-tanks in spring to turn on and fall to turn off; assess any maintenance needs, assess wildlife use	Jemez	RD Wildlife Files	Twice a year
Wildlife habitat improvement	Placement of a new trick-tank on Virgin Mesa to provide water during dry season – benefit to 640 acres	Jemez	RD, Wildlife files	Annual check for wildlife use
Wildlife habitat improvement	TEAMS conducted two weeks of Rapid Stream and Riparian Assessment (RSRA) for the SW Jemez Project (177 points along East Fork, San Antonio, Vallecitos, and Cebolla Rivers)	Jemez	SO files	Annual
Wildlife habitat improvement	Habitat monitoring on 300 acres following thinning in the Canovas (Gallinas WUI) area- funded by NMGF	Pecos/Las Vegas	RD, Wildlife	Project-based

Appendices

Santa Fe National Forest GIS Layers, April 2011

Santa Fe National Forest- Location of GIS Data- Updated 04/20/2011

Layer Files: T:\FS\Reference\GIS\r03_sfe\LayerFile; SDE Connection Files: T:\FS\Reference\GIS\r03_sfe\DatabaseConnection

SDE DATABSE: S_R03_SFE.R03_SFE_LIB (unless otherwise noted) (Server: idb.fs.fed.us User: / Instance: sde:oracle9i::g_r03_sfe Version: S_R03_SFE.R03_SFE_LIB

Layer File Name	SDE Feature Dataset	SDE Feature Class Name	Description	OtherLocation
SFE_Activity_AccomplishedThrough2010.lyr	S_R03_SFE.Activities	S_R03_SFE.ActivityJoined160VW	Activity polygons joined (snapshot) to the FACTS database to display activity type, date, NEPA info and more	
SFE_Activity_Polygon.lyr	S_R03_SFE.Activities	S_R03_SFE.ActivityPolygon	Ground disturbing activities, planned, NEPA, or accomplished polygons	
SFE_CFF_Line.lyr	S_R03_SFE.CFF	S_R03_SFE.CFF_Ln	Cartographic Feature Files (all lines and points that are on 1:24,000 topo maps)	
SFE_CFF_Point.lyr	S_R03_SFE.CFF	S_R03_SFE.CFF_Pt		
SFE_ConstructedFeature_AdminSite.lyr	S_R03_SFE.Constructed_Features	S_R03_SFE.AdminSite	Administrative sites on the Santa Fe National Forest. Includes features like guard stations and ranger stations. Should cover all sites listed in Infra.	
SFE_ConstructedFeature_Bridge.lyr	S_R03_SFE.Constructed_Features	S_R03_SFE.Bridge	Bridges- these locations are derived from Infra based on the recorded milepost on a road.	
SFE_ConstructedFeature_Dam.lyr	S_R03_SFE.Constructed_Features	S_R03_SFE.Dam	Dams on and around the Santa Fe National Forest. Linked to Infra table	
SFE_ConstructedFeature_GravelPit.lyr	S_R03_SFE.Constructed_Features	S_R03_SFE.GravelPit	Gravel pits in and around the westside of the Santa Fe National Forest.	
SFE_ConstructedFeature_Line_akaRangeImprovement.lyr	S_R03_SFE.Constructed_Features	S_R03_SFE.Constructed_Feature_ln	This dataset includes a variety of constructed features, (e.g, fences, bridges, culverts, buildings, communication systems, gates, helipads, parking lots, shooting range, etc.) and non-constructed features which may include natural barriers and other features that need to be maintained spatially. These features are generally tracked and linked to Infra's constructed features.	
SFE_ConstructedFeature_Point_akaRangeImprovement.lyr	S_R03_SFE.Constructed_Features	S_R03_SFE.Constructed_Feature_pt		
SFE_ConstructedFeature_Tower.lyr	S_R03_SFE.Constructed_Features	S_R03_SFE.Tower	Depicts locations of electronic towers and/or fire lookout towers in and around the Santa Fe National Forest.	
SFE_ConstructedFeature_WeatherStation.lyr	S_R03_SFE.Constructed_Features	S_R03_SFE.WeatherStation	Weather stations in and around the Santa Fe National Forest including SNOTEL and RAWS	
SFE_DEM10m.lyr	(Raster)	S_R03_SFE.DEM_10METER	Digital Elevation Model with 10m resolution, along with derived products	T:\FS\Reference\GIS\r03_sfe\Data\Raster\DEM\
SFE_DEM10m_1000FtElevationBand.lyr	(Raster)	S_R03_SFE.DEM_10METER		
SFE_DEM10m_Aspect.lyr	(Raster)	S_R03_SFE.ASPECT		
SFE_DEM10m_Hillshade.lyr	(Raster)	S_R03_SFE.NW_SHADOW		
SFE_DEM10m_HillshadeTif.lyr	(Raster)- not in SDE	Hillshade10m.tif		
SFE_DEM10m_SlopePercent.lyr	(Raster)	S_R03_SFE.SLOPE_PERCENT		
SFE_Fire_CommunityAtRisk.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.CommunityAtRisk	Point locations of communities at risk	
SFE_Fire_CommunityAtRiskWUI.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.CommunityAtRiskWUI	Includes both the WUI's that were approved by USFW as well as the communities at risk	
SFE_Fire_HelicopterDipSite.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.HelicopterDipSite	Locations of dip sites where water is available for use for wildfire suppression.	
SFE_Fire_HistoryPoint.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.Fire_History_pt	Fire history points	
SFE_Fire_HistoryPolygon.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.Fire_History_pl	Fire history polygons- Only fires 10 acres or larger in size	
SFE_Fire_ManagementUnit.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.FireManagementUnit	Fire Management Units (FMU) are units in which fire suppression efforts and resources are managed according to priority and need.	
SFE_Fire_ManagementZone.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.FireManagementZone	The boundaries of the Fire Management Zones and Representative Locations on the Santa Fe National Forest.	
SFE_Fire_PlanningUnit.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.FirePlanningUnit	Fire Planning Units(FPU) are units in which fire suppression efforts and resources are managed according to priority and need.	
SFE_Fire_RegimeConditionClass_R3.lyr	S_R03.Fire_Management	S_R03.Fire_Regime_Condition_Class	Fire Regime Condition Class	idb.fs.fed.us / sde:oracle9i::g_r03_S_R03.R03_LIB
SFE_Fire_Restriction.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.FireRestriction	Preplanning attempt to map closure areas when the Forest goes into Stage I, II, or III fire restrictions.	
SFE_Fire_Severity.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.FireSeverity	Areas burned severely by fire - only available for larger fires where BAER work was done.	
SFE_Fire_WildlandFireUse.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.WildlandFireUse	Areas on the Forest where WFU is allowed or is not allowed.	
SFE_Fire_WildlandUrbanInterface.lyr	S_R03_SFE.Fire_Management	S_R03_SFE.Wildland_Urban_Interface	Wildland Urban Interface Areas approved by USFW. Wildland Urban Interface (WUI) refers to the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.	
SFE_Fish_RGChubOccupiedStream.lyr	S_R03_SFE.Fisheries	S_R03_SFE.RGChub_OccupiedStream	Rio Grande Chub occupied streams.	\\ds.fs.fed.us\EFS\DataCenter\citrix\AppData\jhutchison\Application
SFE_Fish_RGCTBarrier.lyr	S_R03_SFE.Fisheries	S_R03_SFE.RGCT_Barrier	Barriers to Rio Grande Cutthroat Trout Habitat	
SFE_Fish_RGCTOccupiedStream.lyr	S_R03_SFE.Fisheries	S_R03_SFE.RGCT_OccupiedStream	Rio Grande Cutthroat Trout occupied streams. The dataset includes location, habitat, and population data for Core Conservation and Conservation Populations of RGCT	
SFE_Fish_RGCTRestorationOpportunity.lyr	S_R03_SFE.Fisheries	S_R03_SFE.RGCT_RestorationOpportunity	Rio Grande Cutthroat Trout restoration opportunity streams	
SFE_Fish_RGSuckerOccupiedStream.lyr	S_R03_SFE.Fisheries	S_R03_SFE.RGSucker_OccupiedStream	Rio Grande Sucker occupied streams.	
SFE_Land_AdminForest.lyr	S_R03_SFE.Land	S_R03_SFE.Admin_Forest	Administrative/ownership boundaries for the Santa Fe National Forest	

Layer File Name	SDE Feature Dataset	SDE Feature Class Name	Description	OtherLocation
SFE_Land_JemezNRA.lyr	S_R03_SFE.Land	S_R03_SFE.JemezNRA	Jemez National Recreation Area boundary	
SFE_Land_OtherNationalDesignation.lyr	S_R03_SFE.Land	S_R03_SFE.Other_National_Designation	A region subclass depicting National Forest System land parcels that have management or use limits placed on them by legal authority. Examples are: National Recreation Area, National Monument, and National Game Refuge.	
SFE_Land_ProcForest.lyr	S_R03_SFE.Land	S_R03_SFE.Proc_Forest	Original proclaimed forest boundary- may not portray the same extent as the administrative boundary	
SFE_Land_RangerDistrict.lyr	S_R03_SFE.Land	S_R03_SFE.Ranger_District	USFS ranger district boundaries	
SFE_Land_Sections.lyr	S_R03_SFE.Land	S_R03_SFE.Sections	Boundaries of Land Survey features called sections, defined by the Public Lands Survey System Grid. Normally, 36 sections make up a township.	
SFE_Land_SectionsFilledIn.lyr	S_R03_SFE.Land	S_R03_SFE.Sections_FilledIn	Non-surveyed areas without sections and townships were "filled in" at the request for the Fire Dispatch Office to display interpolated TRS for fire fighting purposes.	
SFE_Land_SpecialInterestMgt.lyr	S_R03_SFE.Land	S_R03_SFE.Special_Interest_Mgt	Areas under special or unique management prescriptions. Ex: Anadromous Spawning Area, Indian Reserve Classification Area, Archeological Area, Scenic Area, Research Natural Area	
SFE_Land_SurfaceOwnership.lyr	S_R03_SFE.Land	S_R03_SFE.Surface_Ownership	Ownership parcels of the surface estate	
SFE_Land_SurfaceOwnershipOutsideBox.lyr	S_R03_SFE.Land	S_R03_SFE.Surface_Ownership_OutsideBox	Surface_Ownership_SFNF was UNIONed with a box around the Forest	
SFE_Land_Townships.lyr	S_R03_SFE.Land	S_R03_SFE.Townships	Land Survey features called townships, defined by the Public Lands Survey System (PLSS) Grid. Each township is referenced by its tier and range numbers.	
SFE_Land_TownshipsFilledIn.lyr	S_R03_SFE.Land	S_R03_SFE.Townships_FilledIn	Non-surveyed areas without sections and townships were "filled in" at the request for the Fire Dispatch Office to display interpolated TRS for fire fighting purposes.	
SFE_Land_Wilderness.lyr	S_R03_SFE.Land	S_R03_SFE.Wilderness	Congressionally designated Wilderness areas	
SFE_Land_WildScenicRiver.lyr	S_R03_SFE.Land	S_R03_SFE.Wild_and_Scenic_Rivers	Areas designated as Wild and Scenic Rivers.	
SFE_NortheastNewMexicoMap.lyr	(Raster)- not in SDE	NortheastNewMexico.sid	Northeast New Mexico scanned map	T:\FS\Reference\GIS\r03_sfe\Data\Raster\VisitorMap\
SFE_OrthoPhoto_1936.lyr	(Raster)- not in SDE	Airphoto_East_1935.sid; etc.	Recent and Historical Orthophotos	T:\FS\Reference\GIS\r03_sfe\Data\Raster\Airphoto1935\
SFE_OrthoPhoto_1996.lyr	(Raster)- not in SDE	DOQ_East_1996.sid; West: Central		T:\FS\Reference\GIS\r03_sfe\Data\Raster\DOQ1996\
SFE_OrthoPhoto_2009.lyr	(Raster)- not in SDE	NAIP_LosAlamosCounty_2009.sid; etc.		T:\FS\Reference\GIS\r03_sfe\Data\Raster\DOQ2009\
SFE_Other_AbandonMine.lyr	S_R03_SFE.Other	S_R03_SFE.AbandonMine	Abandon mines within the Santa Fe National Forest.	
SFE_Other_City.lyr	S_R03_SFE.Other	S_R03_SFE.City	Cities in northern New Mexico.	
SFE_Other_GeographicNamesInfoSystem.lyr	S_R03_SFE.Other	S_R03_SFE.GNIS	Geographic Names Info System- points and place names for natural terrestrial features in the state of New Mexico. These features include peaks, valleys, mountain ranges, ridges, and forests.	
SFE_Other_LawEnforcementViolation.lyr	S_R03_SFE.Other	S_R03_SFE.LawEnforcementViol_20012005; 2003-2005; WoodProd	From LEIMARS database, offenses include illegal campfire, traffic accident, poaching, illegal removal of timber, etc.	
SFE_Other_StructureCFF.lyr	S_R03_SFE.Other	S_R03_SFE.Structure	Points from CFFs- structures such as small buildings, large buildings, places of worship, and schools.	
SFE_Other_StructureCounty.lyr	(not in SDE)	Sandoval_Structure_2007.shp; SantaFe_Structure_2007; LosAlamos_Structure_2007	Building foot prints of structures in the surrounding counties	T:\FS\Reference\GIS\r03_sfe\Data\County\
SFE_Other_Town.lyr	S_R03_SFE.Other	S_R03_SFE.Town	Towns and larger populated places in northern New Mexico	
SFE_Other_UtilityLine.lyr	S_R03_SFE.Other	S_R03_SFE.UtilityLine	Depicts locations of Major, Primary and Transmission powerlines on and around the Santa Fe National Forest.	
SFE_Planning_InventoriedRoadlessArea.lyr	S_R03_SFE.Planning	S_R03_SFE.IRA	Inventoried Roadless Areas- the 2001 Roadless Rule prohibits road construction in these areas	
SFE_Planning_ManagementArea.lyr	S_R03_SFE.Planning	S_R03_SFE.ManagementArea	Management Areas in the forest- areas managed for specific cultural, natural, or recreation resources	
SFE_Planning_OilAndGasManagementArea.lyr	S_R03_SFE.Planning	S_R03_SFE.OilGasMgtArea	Oil and Gas management area boundary resulting from the final Oil and Gas EIS.	
SFE_Range_Keyarea.lyr	S_R03_SFE.rmu	S_R03_SFE.rmu_keyarea	Monitoring area boundaries within each pasture.	
SFE_Range_Subunit_akaPasture.lyr	S_R03_SFE.rmu	S_R03_SFE.rmu_subunit	Range pastures and exclosures. (Each range allotment may be subdivided into pastures necessary for grazing management).	
SFE_Range_Unit_akaAllotment.lyr	S_R03_SFE.rmu	S_R03_SFE.rmu_unit	Range allotments, General Resource Areas, and Wild Horse and Burro territories on the Santa Fe National Forest.	
SFE_Recreation_DispersedCampsite.lyr	S_R03_SFE.Recreation	S_R03_SFE.DispersedCampsite	Point locations of dispersed campsites.	
SFE_Recreation_Niche.lyr	S_R03_SFE.Recreation	S_R03_SFE.RecreationNiche	This layer was developed as part of the Recreational Facility Site Master Plan (RFSMP) to answer question, "What role does the Santa Fe NF serve in recreation opportunities for the public?"	
SFE_Recreation_NVUMSurvey2003.lyr	S_R03_SFE.Recreation	S_R03_SFE.NVUMSurvey_2003	National Visitor Use Monitoring survey points for the Santa Fe NF	

Layer File Name	SDE Feature Dataset	SDE Feature Class Name	Description	OtherLocation
SFE_Recreation_OpportSpectrum.lyr	S_R03_SFE.Recreation	S_R03_SFE.RecreationOpportSpectrum	Spatial location of areas showing the type of Recreation Opportunity Settings (ROS) that exist on the Santa Fe NF	
SFE_Recreation_ResidenceCabin.lyr	S_R03_SFE.Recreation	S_R03_SFE.ResidenceCabin	General location for Residence Cabins	
SFE_Recreation_ResidencePlot.lyr	S_R03_SFE.Recreation	S_R03_SFE.ResidencePlot	General location of Residence Tracts and the plots within them	
SFE_Recreation_Site.lyr	S_R03_SFE.Recreation	S_R03_SFE.Recreation_Site_pt	Recreation sites within or in close proximity to an administrative unit; sites so small they are represented as points instead of polygons	
SFE_Recreation_VQO_West.lyr	S_R03_SFE.Recreation	S_R03_SFE.VQO_West	Visual Quality Objectives- the VQO model was run for the Forest for Forest Plan Revision in the 1980s	
SFE_TEU_InterpsSoilLandUse.lyr	S_R03_SFE.TEU	S_R03_SFE.TEU_Interps_SoilLandUse	TEU (terrestrial ecological units) are mapped units of land within which ecological structure, function, capabilities, responses, and management opportunities and limitations can be predicted. This feature class depicts land use interpretations such as erosion hazard.	
SFE_TEU_LandType.lyr	S_R03_SFE.TEU	S_R03_SFE.TEU_Land_Type	TEU feature. This feature provides an inventory of the various ecotypes on the Santa Fe NF	
SFE_TEU_PotentialNatVeg_AggMapUnitRSW.lyr	S_R03_SFE.TEU	S_R03_SFE.PotentialNatVeg_AggMapUnitRSW	This displays the Potential Natural Vegetation (PNV) classifications attached to the map unit components aggregated to the map unit	
SFE_TEU_SFmapLeg.lyr	S_R03_SFE.TEU	S_R03_SFE.TEU_SFmapLeg	The Land Type feature was linked to an Access table for additional information	
SFE_TEU_SoilClassAggMapUnit.lyr	S_R03_SFE.TEU	S_R03_SFE.SoilClass_AggMapUnit	This report displays the Soil classifications attached to the map unit components aggregated to the map unit.	
SFE_TEU_SoilProperties.lyr	S_R03_SFE.TEU	S_R03_SFE.TEU_SoilProperties	The Land Type feature was linked to an Access table for additional information	
SFE_Topo24k.lyr	(Raster)- not in SDE	Topo24k_East.sid; West: Central	1:24,000 quadrangles for the Santa Fe NF	T:\FS\Reference\GIS\r03_sfe\Data\Raster\Topo24k\Mosaic\
SFE_Transportation_County.lyr	(not in SDE)	LosAlamos_Road_2007.shp; etc.	County roads	T:\FS\Reference\GIS\r03_sfe\Data\County\
SFE_Transportation_RoadLinkedInfraOperMaintenanceLevel.lyr	S_R03_SFE.Transportation	S_R03_SFE.RoadLinkedInfra	The GIS road_route feature class was linked to IWeb II_LINEAR_EVENTS table to depict a spatial snapshot of the Infra database.	
SFE_Transportation_RoadLinkedInfraSystemStatus.lyr	S_R03_SFE.Transportation	S_R03_SFE.RoadLinkedInfra		
SFE_Transportation_RoadMain.lyr	S_R03_SFE.Transportation	S_R03_SFE.RoadMain	Main roads in and around the Santa Fe NF, including highways, county roads and main Forest roads	
SFE_Transportation_Trail.lyr	S_R03_SFE.Transportation	S_R03_SFE.Trail	Trail routes on the Santa Fe NF.	
SFE_Veg_BaseVegLocation_akaCompartment.lyr	S_R03_SFE.Vegetation	S_R03_SFE.Base_Vegetation_Location	Locations or comparments derived from the base vegetation feature class	
SFE_Veg_BaseVegSite_akaStand.lyr	S_R03_SFE.Vegetation	S_R03_SFE.Base_Vegetation_Site	This feature class is the plant community, or floristic composition and vegetation structure, occurring at a given location at the current time.	
SFE_Veg_FSVegPlot.lyr	S_R03_SFE.Vegetation	S_R03_SFE.FSVeg_Plot	Plot locations of stand examinations in the field	
SFE_Veg_InvasivePlant.lyr	S_R03_SFE.Vegetation	S_R03_SFE.Invasive_Plant	This feature class depicts the extents of invasive plant infestations	
SFE_Veg_InvasivePlantAll.lyr	S_USA.InvasiveSpecies	S_USA.InvasivePlantAll	All the Invasive Plant Infestation polygons collected by the National Invasive Plant Inventory Protocol.	edwdb.fs.fed.us / sde:oracle9i SDE.DEFAULT
SFE_Veg_MidScaleCanopyCover.lyr	S_R03_SFE.Midscale_Existing_Veg	S_R03_SFE.canopy_cover_map_units	These feature set depicts the existing vegetation of the forests and grasslands of the Southwestern Region at the mid-scale as four products - life form, dominance type map units, canopy cover map units, and size map units	
SFE_Veg_MidScaleDominantType.lyr	S_R03_SFE.Midscale_Existing_Veg	S_R03_SFE.dominance_type_map_units		
SFE_Veg_MidScaleLifeForm.lyr	S_R03_SFE.Midscale_Existing_Veg	S_R03_SFE.life_form		
SFE_Veg_MidScaleSizeClass.lyr	S_R03_SFE.Midscale_Existing_Veg	S_R03_SFE.size_map_units		
SFE_Veg_RiparianAreaTEU.lyr	S_R03_SFE.Vegetation	S_R03_SFE.RiparianAreaTEU	This riparian area layer was developed from the TEU layer by query	
SFE_Veg_RiparianPerennialBuffer.lyr	S_R03_SFE.Vegetation	S_R03_SFE.RiparianPerennialBuffer	This riparian layer was created by buffering the waterbody polygons (CFF), NHD water points that were springs, and the streams 100 feet.	
SFE_Veg_TESPlant_OccurenceAll.lyr	S_USA.TESP	S_USA.TESP_OccurrenceAll	This includes all Threatened, Endangered and Sensitive Plant sites collected by the National TESP Inventory Protocol.	edwdb.fs.fed.us / sde:oracle9i SDE.DEFAULT
SFE_VisitorMap.lyr	(Raster)- not in SDE	SFE_VisitorMap.sid; Mask	Scanned Visitor Map	T:\FS\Reference\GIS\r03_sfe\Data\Raster\VisitorMap\
SFE_VisitorMap_BlackWhite.lyr	(Raster)- not in SDE	SFE_VisitorMap_East_BlackWhite.tif; West		T:\FS\Reference\GIS\r03_sfe\Data\Raster\VisitorMap\
SFE_VisitorMap_East.lyr	(Raster)- not in SDE	SFE_VisitorMap_East.sid		T:\FS\Reference\GIS\r03_sfe\Data\Raster\VisitorMap\
SFE_VisitorMap_Relief.lyr	(Raster)- not in SDE	SFE_VisitorMap_Relief.sid; Mask		T:\FS\Reference\GIS\r03_sfe\Data\Raster\VisitorMap\
SFE_VisitorMap_West.lyr	(Raster)- not in SDE	SFE_VisitorMap_West.sid		T:\FS\Reference\GIS\r03_sfe\Data\Raster\VisitorMap\
SFE_Water_Body.lyr	S_R03_SFE.Water	S_R03_SFE.Water_Body	This feature depicts both perennial and intermittent water bodies as polygons on the Santa Fe NF (areas that cover more than 50 feet on the ground).	
SFE_Water_HUC4.lyr	S_R03_SFE.Water	S_R03_SFE.Hydrologic_Unit_4th_Code	This data set is a complete digital hydrologic unit boundary layer to the Watershed (10-digit) 4th, 5th, and 6th level for the entire United States.	
SFE_Water_HUC5.lyr	S_R03_SFE.Water	S_R03_SFE.Hydrologic_Unit_5th_Code		
SFE_Water_HUC6.lyr	S_R03_SFE.Water	S_R03_SFE.Hydrologic_Unit_6th_Code		

Layer File Name	SDE Feature Dataset	SDE Feature Class Name	Description	OtherLocation
SFE_Water_ImpairedStream.lyr	S_USA_NM.Water	S_USA_NM.NMED303d_2010; S_USA_NM.NMED305b_2010	Impaired Streams	edwdb.fs.fed.us / sde:oracle9i SDE.DEFAULT
SFE_Water_NHD_Point.lyr	S_R03_SFE.Water	S_R03_SFE.NHD_Point	The National Hydrography Dataset (NHD) is a feature-based database that interconnects and uniquely identifies the stream segments or reaches that make up the nation's surface water drainage system.	
SFE_Water_Point.lyr	S_R03_SFE.Water	S_R03_SFE.Water_Point	Groundwater springs and seeps on the Santa Fe NF	
SFE_Water_StreamName.lyr	S_R03_SFE.Water	S_R03_SFE.Stream_Route	This feature class depicts all water drainages within the Santa Fe NF.	
SFE_Water_StreamType.lyr	S_R03_SFE.Water	S_R03_SFE.Stream_arc	This feature class depicts drainages with CFF codes (cartographic feature files) defining perennial and intermittent streams	
SFE_Wilderness_PecosMap.lyr	(Raster)- not in SDE	PecosWilderness.sid	Pecos Wilderness	T:\FS\Reference\GIS\r03_sfe\Data\Raster\WildernessMap\
SFE_Wildlife_AmericanMartenSurvey.lyr	S_R03_SFE.Wildlife	S_R03_SFE.AmericanMartenSurvey	Areas surveyed for pine martens.	
SFE_Wildlife_ElkCalvingArea.lyr	S_R03_SFE.Wildlife	S_R03_SFE.ElkCalvingArea	Elk calving areas	
SFE_Wildlife_ElkCrucialSummerRange.lyr	S_R03_SFE.Wildlife	S_R03_SFE.ElkCrucialSummerRange	Crucial Summer Range: That part of the mid-June to mid-August summer range where elk concentrations are about double (200 percent) the surrounding elk densities.	
SFE_Wildlife_ElkCrucialWinterRange.lyr	S_R03_SFE.Wildlife	S_R03_SFE.ElkCrucialWinterRange	Crucial Winter Range: That part of the winter range where 90 percent of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten.	
SFE_Wildlife_ElkSummerRange.lyr	S_R03_SFE.Wildlife	S_R03_SFE.ElkSummerRange	Summer Range: That part of the overall range where 90 percent of the individuals are traditionally located between spring green-up and the first heavy snowfall.	
SFE_Wildlife_ElkWinterRange.lyr	S_R03_SFE.Wildlife	S_R03_SFE.ElkWinterRange	Winter Range: That part of the overall range where 90 percent of the individuals are located during the average five winters out of ten from the first heavy snowfall to spring green-up.	
SFE_Wildlife_GoshawkForagingArea.lyr	S_R03_SFE.Wildlife	S_R03_SFE.GoshawkForagingArea	Foraging areas are drawn around nest sites taking in appropriate habitat encompassing the nest area for a total of about 6,000 acres.	
SFE_Wildlife_GoshawkManagementArea.lyr	S_R03_SFE.Wildlife	S_R03_SFE.Goshawk_pl	Goshawk management areas on the Santa Fe NF	
SFE_Wildlife_GoshawkReplacementNestSite.lyr	S_R03_SFE.Wildlife	S_R03_SFE.GoshawkReplacementNestSite	As per the SFNF Forest Plan, three nest areas and three replacement nest areas (~30acres) are to be designated within each post-fledgling family area	
SFE_Wildlife_GoshawkSurvey.lyr	S_R03_SFE.Wildlife	S_R03_SFE.GoshawkSurvey	Northern goshawk survey call points and calling routes were combined and buffered by 0.25 miles to approximate the actual area called.	
SFE_Wildlife_JMS_ConservationArea.lyr	S_R03_SFE.Wildlife	S_R03_SFE.JMS_ConservationArea	Areas of Jemez Mountains Salamander habitat to be protected or surveyed	
SFE_Wildlife_JMS_OccupiedStand.lyr	S_R03_SFE.Wildlife	S_R03_SFE.JMS_OccupiedStand	Vegetation Stands that have had positive results in Salamander surveys that have been conducted	
SFE_Wildlife_JMS_SurveyNegative.lyr	S_R03_SFE.Wildlife	S_R03_SFE.JMS_SurveyNegative	These points denote areas searched for Jemez Mountains Salamander with negative results	
SFE_Wildlife_JMS_SurveyPositive.lyr	S_R03_SFE.Wildlife	S_R03_SFE.JMS_SurveyPositive	Areas searched for Jemez Mountains Salamander with positive results	
SFE_Wildlife_JumpingMouseHabitat.lyr	S_R03_SFE.Wildlife	S_R03_SFE.JumpingMouseHabitat	TEUs pertaining to wet meadows which indicate potential habitat for New Mexico meadow jumping mouse	
SFE_Wildlife_MSO_CriticalHabitat.lyr	S_R03_SFE.Wildlife	S_R03_SFE.MSO_CriticalHabitat	Mexican Spotted Owl critical habitat units in its canyon and forest habitats	
SFE_Wildlife_MSO_PAC.lyr	S_R03_SFE.Wildlife	S_R03_SFE.MSO_PAC	Boundaries of Mexican spotted owl management areas, or protected activity center (PAC)	
SFE_Wildlife_MSO_RestrictedArea.lyr	S_R03_SFE.Wildlife	S_R03_SFE.MSO_RestrictedArea	Boundaries of protected Mexican Spotted Owl habitat on the Santa Fe NF	
SFE_Wildlife_PeregrineFalconZone.lyr	S_R03_SFE.Wildlife	S_R03_SFE.PeregrineFalconZone	Zones were created around peregrine falcon nesting areas, based on potential for disturbance to nesting falcons	
SFE_Wildlife_Observation_Polygon.lyr	S_USA.Fish_and_Wildlife	S_USA.FishWildlife_Observation	Wildlife observations	infraweb1.fs.usda.gov FS_PUBLIC_READ 5152:SDE SDE.DEFAULT
SFE_Wildlife_Observation_Point.lyr	S_R03_SFE.NRIS_Wildlife	S_R03_SFE.NRIS_WildlifeObservation_Pt	The NRIS Survey feature class provides survey attribute and location data from NRIS Aquatic Surveys, and Threatened, Endangered and Sensitive Plant Surveys	IWEBDB FS_PUBLIC_0310 sde:oracle11g:/:SDE SDE.DEFAULT
SFE_Wildlife_Site_Point.lyr	S_R03_SFE.NRIS_Wildlife	S_R03_SFE.NRIS_WildlifeSite_Pt		IWEBDB FS_PUBLIC_0310 sde:oracle11g:/:SDE SDE.DEFAULT
SFE_Wildlife_Site_Polygon.lyr	S_R03_SFE.NRIS_Wildlife	S_R03_SFE.NRIS_WildlifeSite_Pl		IWEBDB FS_PUBLIC_0310 sde:oracle11g:/:SDE SDE.DEFAULT