

SANTA FE NATIONAL FOREST FOREST PLAN MONITORING AND EVALUATION REPORT 1999

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FOREST SUPERVISOR'S CERTIFICATION and INTRODUCTION

Forest Supervisor's Certification of Forest Plan Sufficiency

I certify that the Santa Fe National Forest Plan as amended is sufficient to guide management of the Forest over the next year. The *Needs for Change: Preliminary Recommendations for Updating the Forest Plan* section in the monitoring report identifies changes that are necessary in order to maintain the viability of the Plan.

/s/ Leonard Attencio
LEONARD ATENCIO
Forest Supervisor

10/31/2000
Date

This Monitoring and Evaluation Report meets regulatory requirements for completing an annual report (36 CFR 219).

Forest Plan Amendment & Revision

This year we completed three major Forest Plan amendments, documented in Environmental Assessments and Decision Notices: (1) Jemez National Recreation Area Management Plan, (2) East Fork of the Jemez Wild and Scenic River Management Plan, and (3) Pecos Wild and Scenic River Management Plan. However, the decisions were appealed, and the appeals deciding officer reversed the decisions. Therefore, we are revising these documents, and will provide for another public review period prior to issuing new decisions.

Updated agency regulations governing forest plan revisions (at 36 CRF 219), have not been approved by the Secretary of Agriculture. Therefore, we are not expecting to begin Forest Plan revision until fiscal year 2002.

Inventory & Assessment

We are continuing to build our Forest's inventories and assessments for use in environmental planning and analysis work. This year we completed GIS layers for forest vegetation, prescribed and natural fire occurrences, fuel types, and invasive plant species locations.

We made progress on creating our GIS layers for past mining sites, oil/gas leasing sites, heritage resource areas of high site density or value (60% of forest), road status (60% of forest), and dispersed recreation sites (60% of forest). We developed "area of concern" map layers for riparian habitat, water quality, heritage sites, recreation sites, fish and wildlife habitat, and rangelands. We made significant progress in building our "INFRA" database for roads, trails, range structures (eg fences, water tanks), buildings, developed recreation sites, and other facilities. This included using a Geographic Positioning

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System (GPS) unit to map the locations of trails and facilities, collecting data about physical attributes and conditions, and taking photographs.

We completed general landscape (watershed) assessments for approximately 60% of the Forest. We also completed a detailed assessment for the Santa Fe municipal watershed, and began a detailed assessment of the Rio Guadalupe watershed.

SUMMARY OF MONITORING ACTIVITIES

The following table summarizes monitoring activities performed. The four columns consist of:

1. The resource being monitored.
2. The type of monitoring action accomplished.
3. The location of monitoring documentation: Ranger District (RD), Supervisor's Office (SO), or another location.
4. The resource areas (districts) where monitoring was conducted.

RESOURCE	MONITORING ACCOMPLISHED	RECORD	RESOURCE AREAS
Climate	Recorded weather data at RAWs station, including fuel moisture data, used primarily for fire/fuels mgt.	Database in SO-Fire	All
Customer Service	Collected and read visitor comments on fee envelopes and trailhead registers, and letters to District from visitors (kept for a few years)	Letters in RD-Correspond enc	All
Facilities	Inspected permit compliance for powerlines and electronic sites	Report in RD-permits	Pecos-LV, Esp-Coy.
Fire	Inspected private homes within wildland interface for fire protection	No Record	Jemez-Cuba
Fire, Vegetation	Inventoried and mapped fuels vegetation, using air photos & field checks. (Virgin, Chaparral, N.Ojitos projects; over 40,000 ac)	Data & maps in RD-Fire	Jemez-Cuba
Fire, Vegetation	Inventoried resource conditions and fire history in Monument Cyn Research Natural Area, using fire scars and other methods (U of AZ)	Data in RD-Fire	Jemez-Cuba
Fish	Inventoried Rio Grande cutthroat trout streams for fisheries mgt.	Surveys in RD-Fish	All

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RESOURCE	MONITORING ACCOMPLISHED	RECORD	RESOURCE AREAS
Fish	Surveyed fisheries and riparian habitat conditions (American, Palomas, Lower Jemez, San Pedro Parks, Rio Cebolla)	Data in RD-Fish	Jemez-Cuba
Fire, Vegetation	Monitored effectiveness of Rx burns using fuels plots and photo points	Photos/data in RD-Fire/Rng	Jemez-Cuba, Pecos-LV
Heritage Resources	Collected and recorded historical data at HR sites (by volunteers, for research purposes), (Hacienda, Terrero Mine Tramway)	Reports in RD-HR	Pecos LV
Heritage Resources	Monitored specific HR sites for evidence of vandalism, damage, theft (by site stewards)	Site forms in SO-HR	All
Heritage Resources	Surveyed for HR sites in project areas	Reports in SO-HR	All
Heritage Resources	Monitored and evaluated the effects of recreation activities on heritage sites (Rio Chama corridor)	Reports in RD-HR	Jemez-Cuba
Heritage Resources	Collected data and evaluated effects of past activities on HR sites, through Passport In Time (PIT) projects. (Wildhorse & Garcia)	Reports in SO-HR	Jemez-Cuba
Heritage Resources	Inspected 30 National Register sites.	Data in RD-HR	Jemez-Cuba
Partnership Volunteers	Collected data on hours worked by volunteers and partners, mostly recreation and heritage	Reports in RD-Rec & HR	All
Pest Mgt.	Aerial survey, map and report of insect/disease activity (annual, by RO)	Map & Rpt in SO-For.	All
Pest Mgt.	Surveyed for gypsy moth, using traps to determine presence/absence and track spread	Surveys in RO	All
Pest Mgt.	Surveyed for bark beetle, using field samples and satellite imagery (by RO)	Surveys in RO	Esp-Coy, Jemez-Cuba

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RESOURCE	MONITORING ACCOMPLISHED	RECORD	RESOURCE AREAS
Range Condition, Use	Inspected grazing use in key areas, checked range conditions and permit compliance	Forms, photos in RD-Range	All
Range Condition	Monitored cattle use and range conditions on Valle Grande "grassbank" (by NMSU Extension Service)	Photos & Map in RD-Range	Pecos-LV
Range Condition, Readiness	Inspected range conditions to determine readiness for cattle entry	Photos & Doc. in RD-Range	All
Range Facilities	Inspected & inventoried constructed range improvements; verified condition and effectiveness of structures	SO-Infra DTB, with GIS link	All
Recreation Developed Sites	Inspected Jack's Ck Campground reconstruction contract, and effectiveness of reconstruction work	Document, SO-Rec	Pecos-LV
Recreation Developed Sites	Inspected developed sites at least weekly, during fee collection or other site visits, or with host volunteers. Also inspected for hazard trees, and condition of sites and facilities	No Record	All
Recreation Developed Sites	Inventoried all developed sites, including constructed facilities within sites (detailing physical attributes + signs). Field verified and put into MM spreadsheet	MM Spreadsheet, SO-Rec	All
Recreation Dispersed	Inventoried/mapped dispersed sites outside Wilderness (not field-checked or GPS'd)	No Record	All
Recreation Outfitters /Guides	Inspected outfitter/guide campsites for vegetative recovery, other resource conditions and permit compliance	Doc. In RD-Permits	Pecos-LV
Recreation Residences	Inspected recreation residence permit compliance	Report in RD-permits	Pecos-LV
Recreation Trails	Completed inventory forms about visitor contacts & trail conditions (by employees and volunteers)	Forms in RD-Rec.	Pecos-LV
Recreation Trails	Monitored 15 miles trail construction	Doc. in RD-permits	Pecos-LV

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RESOURCE	MONITORING ACCOMPLISHED	RECORD	RESOURCE AREAS
Recreation Trails	Field inventoried trails, including culverts, water bars, etc.	SO-Infra database	All
Recreation Trails	Inventoried Wilderness trail use, using trail counters at trailheads.	Tally shts in RD-Rec	Pecos-LV
Roads	Inspected effectiveness of road obliterations	No Records	All
Soils	Collected and evaluated soil samples for radiation (Los Alamos Nat. Lab)	LANL	Jemez-Cuba
Soils, Mine Reclam.	Inspected effectiveness of mine reclamation on soil/vegetation, Las Conchas, annually	Report in RD-Min.	Jemez-Cuba
Soils, Mine Reclam.	Inspected effectiveness of mine reclamation on soil/vegetation (Guaje)	Report in RD- Min.	Esp-Coy
Vegetation, Soil	Inspected thinning contracts, weekly.	Forms, RD-For.	All
Vegetation, Soil	Monitored effectiveness of thin/burn treatments in improving upland vegetation, using photo points (Gallinas River watershed)	Photos in RD-Forestry	Pecos-LV
Vegetation, Soil	Monitored effectiveness of restoration & research project, using thin, burn and other treatments (Garcia Cyn.)	Photos and Report, SO- For.	Espanola
Vegetation, Rare Plants	Surveyed for and mapped Arizona willow, San Pedro Parks & Pecos Wilderness (potential habitat)	Reports RD-Wldlf +GIS	Pecos-LV
Vegetation, Inv. Plants	Surveyed for and mapped inventory of invasive plants (ie noxious weeds)	SO-GIS	All
Vegetation, Inv. Plants	Inspected effectiveness of Russian olive/salt cedar eradication, riparian enhancement project (Jemez)	Report in RD-Watershed	Jemez-Cuba
Water and Safety	Evaluated effects from flooding of Martinez lake, effectiveness of dam structure, and effects on downstream safety	RD file State Eng (water rights)	Esp-Coy
Water Flow, Yield; Riparian	Recorded snow-course & streamflow data for Rio Grande and Rio Chama, incl. runoff and storage (USBS). Completed interagency evaluation of effects on riparian vegetation	Army Corps, & Park Service records	Pecos-LV, Esp-Coy

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RESOURCE	MONITORING ACCOMPLISHED	RECORD	RESOURCE AREAS
Water Quality	Monitored water quality of streams, annually (by NMED in cooperation with FS)	State 305B Rpt., in SO-Hydrol	All
Water Quality	Surveyed streams using Proper Functioning Condition protocol (Gallinas River & Rio Gallina)	Report in SO-Hydrol.	All
Water Quality	Monitored water quality of wells and other facilities that provide drinking water, at least annually (by NMED)	Reports in SO-Eng,	All
Water Quality	Monitored SF municipal water supply (City)	City of SF	Esp-Coy
Water Quality	Tested water quality in test wells on Caja	SO-Hydrol	Esp-Coy
Water Quality	Monitored water quality on tributary creeks to Jemez River (by Pueblo).	Jemez Pueblo	Jemez-Cuba
Water Quality	Inspected effectiveness of watershed restoration work, Rio Puerco (BLM)	BLM	Jemez-Cuba
Water Quality	Monitored domestic water sources (on Forest) for Cuba, La Jara, & Regina water supply.	Cuba, La Jara & Regina	Jemez-Cuba
Water, Mine Reclam.	Monitored water quality at Nacimiento mine, checking effectiveness of reclamation (by RO)	SO-Haz.Mat	Jemez-Cuba
Water rights	Collected and evaluated flow data: Rio de las Vacas acequia (ditch)	SO-Hydrol	Jemez-Cuba
Water Rights	Inspected and evaluated water use at old Coyote Admin. Site for water rights assessment	SO-Hydrol.	Jemez-Cuba
Water Yield	Recorded snow-course precipitation data, monthly, Jan-Apr (by NRCS)	Data in SO-Hydrol	All
Wildlife	Surveyed for Jemez Mountain salamander, Valle project area, and 4 perm. plots- Jemez	GIS data base	Esp-Coy, Jemez-Cuba
Wildlife, Spotted Owl	Surveyed for spotted owls in project areas (approx 10K acres, Chaparito & Indian Ck) Surveyed 4 spotted owl PACs for status/use.	Surveys and Report in RD-Wildlife	Pecos-LV

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RESOURCE	MONITORING ACCOMPLISHED	RECORD	RESOURCE AREAS
Wildlife Species & Habitat	<ul style="list-style-type: none"> - Surveyed for spotted owls, using micro-habitat protocol, 10 plots (Chaparral project) - - Surveyed 10 spotted owl PACs (10,000+ ac.) - Surveyed for goshawk, 4,500 ac. - Surveyed breeding birds, 25,000 ac. - Surveyed effectiveness of elk hunt in reducing population in Dome/ Bandelier area, using check stations (with NM Game & Fish) - Inspected for black bears near recreation sites - Surveyed for elk/deer populations (NM Game & Fish) 	Reports & data in RD-Wildlife	Jemez-Cuba

What Did We Learn From Monitoring?

Fire

- Prescribed burning is meeting objectives for vegetative response
- Need to consider the impact of burning stumps on heritage sites
- Some burn prescription parameters should be adjusted, others were validated
- Need to reduce more live fuels before burning for visuals and fuel-break effectiveness
- Fall burns don't cause excessive erosion
- Lop-and-scatter is better than piling slash before burning
- If thinning in winter, snow will compress the slash, reducing the need to lop and scatter
- Phase-in fuel-breaks when adjacent to private homes
- Foam alone isn't effective in protecting flammable historic structures from fire; need to add other methods like wrapping sites with fire shelters and removing fuels from around sites

Invasive Plants:

- Herbicides work for controlling salt cedar and Russian olive
- We can safely apply herbicides in riparian areas

Range:

- Range conditions are generally better than expected (worse in some cases)
- Range permittee cooperation is generally better than expected (worse in some cases)
- GIS range capability analysis closely reflects actual capability
- 70% of range improvements found during inventory were not in our existing records
- Most range improvements have reached their life expectancy and need replacement
- Need better documentation of monitoring

Roads:

- Public doesn't respect motorized-use road closures as they are currently done
- Closures are difficult to enforce

What Are The Emerging Issues?

Not much change from last year, except for the following additions:

Fire and wildland-urban interface

There is increasing concern about the threat of large-scale high-intensity wildfires, particularly in wildland-urban interface areas and municipal watersheds. There is also increasing concern about prescribed burning causing problems with smoke or escape fires.

Recreation

There is increasing controversy over whether or not to charge user fees for recreation use of public land, to help defray some of the management costs.

Road management

There is increasing public concern about road maintenance costs and resource impacts associated with a high density road system, thus there is increased emphasis on decommissioning roads. However, there are also public concern about losing access to some areas if more roads are decommissioned.

Roadless areas

There are concerns and controversies regarding the conservation and protection of roadless areas.

Valles Caldera

There are many management issues associated with this newly acquired land, including management of recreational uses, cattle and elk management, issues about generating revenues and how the board will function, and others.

What Are The Barriers To Effective Monitoring, And What Would You Like To Change Or Improve?

Lack of time, funding and people; Other priorities, including infra

- Get adequate time, funding and people to do monitoring
- Spend less time on meaningful measures, infra & budget work plans
- If specific inventories or monitoring is required, then money should be provided
- Make inventory/monitoring a priority

Lack integrated/team approach; Lack simple, clear standards and protocols

- Do integrated-resource inventories and monitoring; a consolidated/team approach

- Improve protocols for MM/infra because they are poorly designed now
- Improve/communicate standards for documentation (eg. new range monitoring forms)

Lack adequate technology tools, training and access to GIS at District level

- Get appropriate technology to Districts, e.g. data recorders, GPS units, etc.
- Improve GIS training/technology/personnel to Districts
- Provide a means for Districts to input data into GIS & Forest databases
- Project survey requirements and monitoring plans are unrealistic

Lack effectiveness monitoring after project completion

- Improve monitoring plans in project EAs so they are realistic/feasible
- Improve or eliminate spotted owl habitat monitoring; make it useful, realistic
- Add heritage site inspections after project implementation (effectiveness check)

Lack baseline inventories; Lack NMED-FS coordinated protocol

- Improve/increase inventories for: PJ woodlands, forest vegetation structure, wilderness use, trail conditions, fish populations, range conditions, roads, etc
- Increase FS involvement with NMED in determining which streams to sample, and to differentiate between stream reaches on and off of NFS lands

What Research Is Needed?

Resource area (district) staffs identified the need for better research information on:

- Non-point source pollution (total maximum daily load)
- Elk numbers and damage
- Invasive plant locations, spread, & area-specific control methods
- Wilderness capacity, levels of acceptable change
- Wilderness fire history
- Comparisons of ecological conditions in grazed versus un-grazed pastures
- Pre-historic Native American use, land conditions, Pueblo sites

Public Participation Plan: How Can We Involve And Inform The Public?

- Do outreach with groups interested in particular projects or areas on the Forest to encourage their participation.
- Develop partnerships/agreements with interested groups to collect and evaluate inventory and monitoring data (eg. Santa Fe Watershed partnerships)
- Use internet, correspondence, news media, etc. to inform and involve the public in planning, inventory and monitoring activities.

What Is Our Progress In Moving Toward Desired Future Conditions?

We made significant progress moving toward desired conditons in key national resource emphasis areas: Forest Health, Watershed/Riparian, Recreation and Partnerships. For example, we:

- Reduced fuel loads and created fuel breaks to protect wildland urban-interface areas and watershed values.
- Obliterated or improved roads to reduce water quality and soil erosion problems.
- Completed allotment management plans designed to reduce soil, water and riparian impacts from cattle grazing. Also established a grass bank allotment on Rowe Mesa to allow other cattle allotments to improve.
- Upgraded recreation sites to improve riparian conditions, aesthetics, safety and accessibility.
- Built collaborative partnerships with numerous groups outside the FS.

The following (specific) Forest Plan implementation accomplishments contributed to our progress in moving toward desired conditions (from Management Attainment Report):

<u>Roads/Trails</u>		<u>Fish and Wildlife</u>	
Road reconstruction	7.9 miles	Wildlife habitat enhanced	170 acres
Trail constr/reconstr	39 miles	Fish streams enhanced	10 miles
Roads decomissioned	92 miles		
Roads fully maintained	20 miles	<u>Range (Grazing)</u>	
<u>Vegetation/Fuels</u>		Allotments monitored to std	35 allotments
		Livestock use (billed)	69,801 head months
Noxious weed treatment	100 acres	Allotments NEPA done	7 allotments
Fuel hazard reduction	12,437 acres	Forage improvement	1,500 acres
Reforestation	104 acres	Range structures built	47 structures
Non-commercial thinning	1,194 acres		
Harvest volume	26,052 CCF	<u>Heritage (Archaeological) Resources</u>	
Harvest volume	13,026 MBF	Heritage sites evaluated	451 sites
<u>Lands/Minerals</u>		Heritage sites interpreted	2 sites
Land ownership adjustment	98,650 acres	Heritage sites protected	333 sites
Land boundaries marked	3 miles	<u>Special Uses</u>	
Abandoned mines reclaimed	1 mine site	Special use permits processed	38 permits
Minerals/energy administr'd	35 operating plans	Special use permits admin'd	212 permits
Energy acres processed	6400 acres		
Geologic permits processed	1 permit document	<u>Human Resources</u>	
Non-energy ops processed	174 operations	Senior service	869 enrollee wks
		Volunteers	8 enrollee yrs
		Youth conservation corps	34 enrollee wks

NEED FOR CHANGE: PRELIMINARY RECOMMENDATIONS FOR UPDATING THE FOREST PLAN

Based on an internal review of the Forest Plan conducted by each group of resource staff specialists (RD and SO), we determined that management direction for virtually every program covered in the Forest Plan needs to be updated. Forest Plan management direction is out-dated and does not reflect current national policies. Most of the Forest Plan direction is associated with intensive timber harvesting, reforestation, road construction, and other management activities emphasized in the 1980s. There is little or no direction related to our current national and regional emphasis areas such as watershed restoration, recreation and scenery management, fuel hazard reduction, road decommissioning, invasive plant control, or wildland-urban interface issues. The Forest Plan does not provide direction that reflects current issues, goals or objectives.

Preliminary recommendations for amending/revising (updating) the Forest Plan should be reviewed and refined through public involvement activities and during the forest-wide inventory/assessment process. The edited recommendations should then be reviewed and prioritized by the forest leadership team.

Preliminary recommendations for Forest Plan updates are as follows:

Management Areas:

Combine management areas (and their associated standards/guidelines) and simplify the Plan with respect to management area emphasis. There are management areas where there is no discernable difference in the way they have been used or managed in the past 10-15 years, and the standards/guidelines are almost identical. The resource specialists believe there would be no change to the environment or public land use if the following areas were combined:

Areas *A* and *B*. Both are heavily forested areas with a timber and wildlife habitat emphasis.

There is no longer an emphasis on intensive stand-regeneration timber harvest, and there is no difference in wildlife habitat values between the *A* areas and *B* areas.

Areas *C*, *D*, *E* (visual quality/recreation emphasis).

Areas *P*, *Q*, *R*, *S* (heritage resource emphasis).

Areas *G* and *K* (wildlife/forage emphasis in primarily pinon-juniper woodlands).

Areas *N* (T & E species habitat) and *L* (roadless, semi-primitive, non-motorized recreation).

Regarding area *N*, the current inventory of occupied and potential T & E species habitat reveals that area *N* does not correlate well with T&E habitats. However, because area *N* is comprised of small areas isolated from developments and are predominantly in a natural condition (and in inventoried roadless areas), they have the same characteristics of *L* areas and are used and managed the same as *L* areas.

Maintain the existing distinct management areas for the remaining mgt areas:

F (proposed)- Wild and Scenic Rivers

H- Wilderness Areas

I- High density/high value heritage resource areas

J- Gallinas Creek Municipal Watershed;

M- Research Natural Areas
O- Santa Fe River Municipal Watershed;
X (proposed)- Jemez National Recreation Area;

Modify the *I* management areas to reflect updated heritage resource site inventories. The *I* areas would be smaller in size, but there would be more *I* areas. They are currently very inaccurately mapped (due to the limited inventory available in 1980), and do not correlate well with our inventory of high value/high density sites. This situation causes problems in Plan implementation.

Incorporate special interest areas into the Plan as management areas, such as the geologic area and Canadian dogwood botanical area that were included in NEPA decisions. Add their associated standards and guidelines, and include them on the management area map. The geologic area was designated in 1987, and the botanical area was included in the Plan amendment for the East Fork of the Jemez Wild and Scenic River. Without identification as management areas, there is no way for land managers to recognize the existence of these special interest areas.

Officially designate the Ladrones Mesa and Canada Bonito Research Natural Areas (*M* areas) in the national system of RNAs. These two RNAs were proposed and allocated as RNAs in the Forest Plan and have been managed as RNAs for over 12 years. If they are not formally adopted as RNAs by the Forest Service Chief, then they should be assigned to a different management designation in the Forest Plan.

Transportation and travel management

Revise the travel management portion of the Plan, as it is extremely out-dated. Road numbers have changed, and numerous roads have been added to the road system inventory, including many user-created roads and old logging roads that were never obliterated. Update the status of roads and road maintenance levels (identifying whether roads are open, closed or obliterated and to what level they are to be maintained). In some locations, the road location, surface conditions and/or high density of roads are causing problems with wildlife habitat, riparian, recreation, and aesthetic values. Designate which roads should be decommissioned or upgraded in order to reduce environmental impacts.

Update the travel management plan in terms of motorized and non-motorized uses. Lacking a clear, updated travel management plan has resulted in unmanaged motorized use, both on and off of roads. Some of the motorized use has resulted in impacts to riparian areas and other sensitive resources. Motorized use is occurring within some designated non-motorized areas. In addition, it is almost impossible to enforce administrative closure orders (prohibiting motorized use in specific areas) that are not on the forest visitor map or Forest Plan map. We have received a number of complaints that road closures or motorized use restrictions have not always been made through the NEPA/public involvement process. In addition, the travel restrictions designated on the Forest visitor map are inaccurate, outdated and often confusing to forest users.

Develop consistency with the adjacent Carson National Forest regarding travel management. Currently on the Carson NF, roads are closed unless designated open, which is inconsistent with our policy of having roads open unless designated as closed. This difference is a problem for forest users.

Replace the road density standard with one that links road density to environmental impacts. The road density standard was found to be ineffective and fairly meaningless because it is an average of the road miles/square mile within management areas that often cover large areas in different parts of the forest. There are many instances where road density meets the standard as an average for the management area, however, high road density in portions of the management area is causing adverse environmental impacts. In other management areas, the density standard may be exceeded but the roads are well distributed on a dry mesa and are not causing adverse environmental impacts.

Timber Management

Replace the outdated timber production emphasis (standards/guidelines). Our forest vegetation management practices have dramatically changed over the past 12 years. Our timber management staff and forestry personnel agree that the timber management standards/guidelines need to be replaced in order to accurately reflect current management policies and practices. The Plan emphasizes using intensive, even-age, stand-regeneration harvest systems, and methods designed to maximize timber production, growth and yield. It emphasizes improving horizontal diversity through even-age management practices such as clearcuts and two-step shelterwood cuts. This direction is inconsistent with national direction.

Add management goals, standards and guidelines regarding uneven-age management, thinning from below, and methods designed to maximize biological diversity and natural disturbance regimes. Direction should emphasize reducing the excessive numbers of small trees and retaining the largest trees.

Eliminate the very prescriptive, quantitative standards/guidelines specifying basal areas, trees per acre, etc. (pp. 57-58). The table and most other reforestation direction on pg. 70 should also be deleted because it was based on outdated FS handbook direction and timber production goals that no longer exist. Incorporate (entirely or by reference) the updated handbook direction.

Add direction regarding aspen management, because aspen is being lost as a result of long-term fire suppression, and aspen provides important ecological and scenic values. The Plan is silent regarding aspen management.

Clarify and update descriptions of timber suitability, adding explanation regarding thinning of "unsuitable timberlands" (such as Santa Fe watershed) for benefits other than timber production. There are recurring problems with Plan implementation due to different interpretations of what type of harvesting, if any, can occur on non-suitable timber lands.

Update pest management direction to reflect the latest policies and science regarding insects and disease in the forest. The Plan emphasizes eradication of dwarf mistletoe and spruce budworm, primarily through the harvest of the largest overstory trees. This management direction is outdated and causes problems in Plan implementation.

Clarify management direction regarding mature and old growth forest. There are different interpretations about how to apply the standards/guidelines regarding “allocation of old growth”, which causes recurring problems with meeting public expectations.

Wildlife management

Update/replace wildlife management standards/guidelines. Most of the direction reflects an old focus on species-management rather than habitat management. The Plan emphasizes management of game species such as elk, deer and turkey. It does not reflect changes in habitat management that emphasize retaining habitat structures and functions.

Add direction that adequately reflects compliance with recovery plans for T & E species and conservation agreements for sensitive species. The Plan lacks direction regarding some of the current listed and sensitive species and their habitats. There is no direction regarding the endangered southwestern willow flycatcher. The status of the peregrine falcon has changed since the Forest Plan was approved, yet the Plan has not been updated to reflect that change. The wording of the direction in the Plan causes serious problems with Plan implementation and consistency.

Update the Management Indicator Species list in the Plan (again, based on indicators of even-age timber harvest). It is inappropriate for current use, yet we are legally required to use it in project planning (NEPA) and analysis. This is an important concern because we spend considerable time trying to meet this legal requirement while the MIS we are analyzing are not today’s species of concern (or appropriate management indicators).

Eliminate the 2,500-acre Dome Wild Burro territory and simply manage that area as part of the Wilderness (it is in the Wilderness). It is no longer used by wild burros and is unsuitable for grazing by burros, horses or livestock due to rough, steep terrain, highly erosive soils, lack of water, and lack of forage.

Update guidelines for snags and down logs to correlate with the latest scientific research.

Eliminate the requirement to use the WESTWILD model, as it is no longer a state-of-the-art wildlife analysis tool.

Eliminate direction for alpine tundra ecosystems, which do not exist on the forest.

Eliminate outdated direction regarding chaining/retreatment of pinon-juniper and sage areas.

Eliminate direction on fish stocking levels and wildlife population numbers, because it is in the State’s jurisdictional authority to manage fish and wildlife populations.

Recreation/Scenery Management

Update/correct the Recreation Opportunity Spectrum (ROS) classifications, as many areas were incorrectly classified and need to be corrected.

Replace the old VQO system with the current scenery management system. The current scenery management direction is very outdated and fairly meaningless because the VQO classifications actually reflect existing conditions rather than desired conditions or objectives. The Plan is lacking a desired VQO or scenery objective, yet the Plan direction is written in a way that implies that VQOs are to be used as “objectives” to strive for. The new scenery management system provides for comparing existing scenic integrity with desired scenic integrity. While we are asked by the WO and RO to use the new scenic management system, it is not consistent with our Plan, and therefore causes problems.

Eliminate (or replace) the vegetation management prescriptions for visually sensitive areas (pp. 57-58) as they are completely outdated. They are based on intensive regeneration harvest treatments which are no longer being implemented.

Incorporate the management plans for the JNRA and the three Wild/Scenic Rivers into the Plan (replacement pages, maps). Complete the boundary definition for the Chama W/S River.

Add direction regarding fee demonstration areas which are currently being implemented.

Add updated direction reflecting the universal access system requirements.

Add direction and objectives regarding environmental education and interpretation activities.

Heritage Resources

Eliminate the standards/guidelines based on an expired settlement agreement.

Incorporate or reference new consultation requirements.

Add direction regarding protection of heritage resources during prescribed burn projects.

Update and clarify the survey and consultation/clearance required prior to making NEPA decisions for landscape-scale projects. Currently we have a problem completing the required survey and clearance prior to making the NEPA decisions for large-scale thinning and prescribed burning projects.

Update tribal consultation requirements reflecting new regulations.

Fire/Fuels

Significantly revise and update standards/guidelines to get them consistent with current fire and fuels management policies, such as contained in the Interagency Fire Management Plan. Current Plan standards/guidelines emphasize fire *suppression*, and have very little direction

regarding wildland fire *use*.

Eliminate the current quantitative suppression objectives listed for each management area, and replace them with forest-wide suppression objectives that reflect current agency policy.

Incorporate direction from the 1999 wildland fire management plan into the Forest Plan.

Air quality

Add air quality standards/guidelines. This is an important resource that is being affected by our prescribed burn projects and yet the Plan is silent regarding air quality.

Range management

Update/replace range management direction in order to reflect current policies and practices. Guidelines in the Plan are based on old (deleted) FS handbook direction, and should be replaced with the updated handbook direction. Standards/guidelines regarding range management intensity levels are no longer appropriate and should be updated.

Add direction that reflects updated range allotment and permit administration standards.

Update the range capacity analysis for the Plan. The original capacity analysis is outdated and does not meet project planning needs. It is currently being revised on an allotment-specific basis. The Plan is required to identify capable grazing lands. Use the allotment-specific capability analysis in updating the Plan's capability analysis (replacement pages, map).

Add management direction that addresses current issues regarding grazing conflicts with riparian/watershed values, threatened/endangered species habitat, or recreation values.

Update the Plan to incorporate the latest changes regarding the "northern new mexico" policy and traditional rural land use in northern NM.

Watershed

Add direction regarding invasive plants (formerly called noxious weeds). There is no direction regarding the control of invasive plants, using herbicides or mechanical methods.

Update the Best Management Practices in the Plan which are outdated and need to reflect current policy and direction from state and federal BMP documents. The old BMPs focused on mitigating impacts from intensive, even-age timber harvesting, log skidding and road building.

Incorporate the proper functioning condition protocols, and classifications of hydrologic conditions, based on the latest science and agency policies.

Add direction regarding the latest national watershed management policy.

Add direction regarding management of hazardous waste sites, including illegal dump sites, which are numerous on the forest.

Monitoring Plan- Forest Plan Chapter V

Update/replace this entire chapter (using regional guidance). Most of the items listed for monitoring are not the items that should be monitored. They don't indicate whether or not implementation has been effective or if we are moving toward desired conditions (goals).

Eliminate the monitoring objective to "Decrease the annual sale quantity of sawtimber to 39 mmbf/year", and objectives for meeting an annual sale quantity (ASQ), because sawtimber sales were reduced to almost zero and the ASQ was re-defined as a "ceiling" rather than a target. Forest Service policy currently emphasizes ecosystem restoration goals over commodity outputs, such that producing a specific timber volume is no longer a required target. Producing timber products is viewed as a by-product of meeting ecological objectives.

Eliminate the outdated objective to "Authorize 4 demonstration timber sales on slopes greater than 40%". Steep slope logging is no longer allowed on the Forest (1996 amendment).

Eliminate the objective to "Recommend portions of Chama, Pecos and East Fork of Jemez rivers for Wild and Scenic Rivers designation. The rivers were recommended, then designated by Congress. Once the management plans for these designated river sections have been revised, they need to be incorporated into the Forest Plan.

Eliminate the objective to "Propose two areas for wilderness totaling 2,138 acres adjacent to northeast part of Pecos Wilderness". This was completed.

Eliminate the goal to "Complete timber reanalysis". This was done in 1994.

Eliminate the objective to "Propose Ladrones Mesa and Canada Bonito as Research Natural Areas, pending final approvals". This was met in the 1987 final Forest Plan which allocated both areas to be managed as RNAs.

Eliminate the objective to "Establish a Special Interest Area for protecting Canadian dogwood in East Fork of Jemez River corridor". This was done as part of East Fork of the Jemez Wild and Scenic River Management Plan and Forest Plan Amendment.

Forest Plan Glossary

Update/replace the entire glossary with the latest national land management planning glossary terms and definitions. The Plan now contains numerous outdated terms and does not include important new land management terminology.

PREPARERS

The list of monitoring activities and responses to evaluation questions were provided by resource area (district) staffs, with additional information provided by some SO resource specialists. The preliminary recommendations for updating the Forest Plan were identified by each group of resource area (district) and SO specialists assigned to each program area. This document was prepared by the Forest Planner and reviewed by the Land Management Planning Staff Officer.