

# 1999 ANNUAL MONITORING AND EVALUATION REPORT

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January 28, 2000

## FOREST SUPERVISOR CERTIFICATION

I have reviewed the Annual Monitoring and Evaluation Report for the Cibola National Forest and Kiowa, Rita Blanca, Black Kettle and McClellan Creek National Grasslands that was prepared by the forest interdisciplinary (ID) team for Fiscal Year 1999. I believe that the results of monitoring and evaluation, as documented in this report, meet the intent of both Chapter 5 of the Forest Plan and current Regulations (36 CFR 219.12(k)).

The Cibola National Forest has identified changes in conditions or demands of the public that would change the goals, objectives, or outputs of the Forest Plan (36 CFR 219.10(g)) and has filed a Notice of Intent to publish an Environmental Impact Statement to Revise the Land and Resource Management Plan.

I have also considered the recommendations made by the ID Team regarding the proposed changes to the monitoring procedures or implementation methods, as described in Section G of this report. I concur that the recommended changes are necessary, and will help to improve the effectiveness of the forest monitoring program and implementation of resource projects on the ground. Current regulations allow changes to be made to Forest Plans in the form of amendments (36 CFR 219.10(f)) that have been recommended by the ID Team (36 CFR 219.10(a) (3)). Forest personnel will prepare an amendment to the Forest and Grassland Plan to revise the current monitoring plan in Chapter 5, as funding allows, and will comply with the appropriate analysis and documentation procedures of all laws and regulations.

I have evaluated this monitoring report's results and recommendations. I have directed that the recommendations be implemented, unless new information or changed resource conditions warrant otherwise. I have considered funding requirements in the budget necessary to implement these actions. With the completed changes under "FY2000 Action Plan" and the ongoing Forest and Grassland Plan Revision process, the current Forest Plan is sufficient to guide National Forest and National Grassland management for FY 2000, unless on-going monitoring and evaluation identify further need for change. This is not an appealable decision, according to 36 CFR 215.7, 217.3; "Decisions Subject to Appeal".

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LIZ AGPAOA

Forest Supervisor

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Date

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## A. INTRODUCTION

When the Cibola National Forest Land and Resource Management Plan (Forest Plan) was approved in August 1985, it charted a course of action for the management of the Cibola National Forest and Black Kettle, McClellan Creek, Kiowa and Rita Blanca National Grasslands for a 10 to 15 year period. One of the requirements of the forest planning process was a commitment to monitor and evaluate how well the Forest Plan is implemented (36 CFR 219.12(k)). The process also includes making subsequent modifications to the Forest Plan in response to monitoring and evaluation. The annual report for FY 1999 documents the results of the monitoring activities that occurred, evaluates those results, and describes the rationale for any changes that have been recommended by the interdisciplinary team. The monitoring program should be viewed as a method of determining how well the Forest Plan is being implemented, and not a system that only detects problems. This report summarizes the results of Forest Plan monitoring and evaluation that was scheduled for Fiscal Year 1999.

The regulations at 36 CFR Part 219 describe the purposes for evaluating the Forest Plan for the Cibola National Forest, and are summarized below:

- ◆ A program of monitoring and evaluation shall be conducted that includes consideration of the effects of National Forest management on land, resources, and communities adjacent to or near the National Forest being planned and the effects upon National Forest management activities on nearby lands managed by other Federal or other government agencies or under the jurisdiction of local governments (36 CFR 219.7(f)),
- ◆ to determine if conditions or demands in the area covered by the Forest Plan have changed significantly enough to require any revision to the Plan (36 CFR 219.10(g)),
- ◆ to determine if budgets have significantly changed the long-term relationships between levels of multiple-use goods and services enough to create the need for a significant amendment (36 CFR 219.10(e)),
- ◆ to determine how well the stated objectives of the Forest Plan have been met (36 CFR 219.12(k)), and
- ◆ to determine how closely Management Standards and Guidelines in Chapter IV of the Forest Plan have been followed (36 CFR 219.12(k)).

The Annual Monitoring and Evaluation Report for Fiscal Year 1999 meets the intent of Chapter V of the Forest Plan to summarize the findings, conclusions, and

recommendations of the forest ID team resulting from the forest program of monitoring. It also provides an important and concise communication link with the public and across all levels within the Forest Service. By disclosing the effectiveness of implementing the Forest Plan, this enables forest and grassland managers to identify needed research and make shifts in monitoring to most effectively measure overall forest and grassland health.

It is important to note that this report is not about individual project monitoring, which is an ongoing forest activity. However, some of the results of individual projects have been considered and aggregated in the preparation of this report. The bulk of this report is the resource-by-resource description of Forest Plan monitoring accomplishments and findings compared against established goals and objectives.

## B. SUMMARY OF REQUIRED 1999 MONITORING

In Fiscal Year 1999 the following five resource categories were required to be monitored in accordance with Chapter 5 of the Forest Plan: timber, lands, cultural resources, wildlife, and protection. Within each resource category, headings outline the specific monitoring items required. The numbers associated with each monitoring item correspond with the monitoring item number found in Chapter 5 of the Forest Plan. The following is a summary of the monitoring that was done by resource category.

### Timber (Monitoring Items 3-5, 7)

#### 3. Acres in Need of Reforestation

The Forest Plan requires reporting acres in need of reforestation in FY99. Based on figures in the Rocky Mountain Resource Information System (RMRIS) database, the forest currently has 39 acres identified as being in need of reforestation. These areas are classified as "maintenance." This means they are existing plantations that do not meet current regional stocking requirements. Natural regeneration will be used as the tool to meet those Regional standards.

Of the 74 acres identified in this category in the 1998 Monitoring Report, eighteen were treated during fiscal year 1999 through mechanical site preparation and natural regeneration on the Mt. Taylor RD. Another seventeen acres were reclassified as being stocked in accordance with revised Regional standards.

**4. Timber Stand Improvement Acres**

Based on figures in the RMRIS database, the forest has 1,310 acres of forested land identified through the NEPA process as needing timber stand improvement treatments. During FY99, 1,113 acres were precommercially thinned on the Forest. Knutson-Vandenberg (K-V) funding was used to accomplish most of this work.

**5. Sawtimber Offered in Net Board Feet**

Based on the Periodic Timber Sale Accomplishment Report (PTSAR) and the summary of Timber Cut and Sold on National Forests, the Forest offered 92.4 thousand board feet (MBF) of sawtimber.

**7. Adequate Stocking of Regeneration Harvests**

Based on information in the RMRIS database, the Forest has no regeneration harvest areas in need of regeneration. All such areas have previously been certified as being adequately stocked.

**Wildlife (Monitoring Items 6-8)**

**6. Threatened or Endangered Animals**

The forest is required to report on the status of threatened or endangered animals inhabiting lands managed by the Cibola National Forest and Grasslands. Table 1 summarizes population trends of each species.

The US Fish & Wildlife Service delisted the peregrine falcon last year. The Forest is required, however, to continue to monitor and manage this species.

**7. Threatened, Endangered, or Sensitive Plants**

The forest is required to report on the status of threatened, endangered or sensitive plants inhabiting lands managed by the Cibola National Forest and Grasslands. Table 2 summarizes population trends of each species.

Table 1 – Population Trends of Threatened or Endangered Animals

Threatened or Endangered Animal Species	Presence of Animal	Population Trend
bald eagle	4 to 14 birds sighted on Sandia and Mountainair RDs during spring and fall migration  winter occurrences on Lakes Marvin and McClellan	stable numbers of migrating individuals  stable wintering populations
peregrine falcon*	8 occupied sites	reproduction occurring
Mexican spotted owl	47 established protected activity centers	reproduction occurring
southwestern willow flycatcher	1 suitable nest site occupied in 1994 only	unknown
mountain plover*	sightings reported	no population estimates
lesser prairie chicken*	sightings reported	no population estimates
Zuni bluehead sucker*	present	no population estimates
northern goshawk*	19 breeding territories	reproduction occurring

\* Not currently T&E species but are important enough to warrant tracking

Table 2 – Population Trends of Threatened, Endangered, or Sensitive Plants

Threatened, Endangered, or Sensitive Plant Species	Presence of Plant	Population Trend
Zuni fleabane	22 populations	appears stable
grama grass cactus	present in military withdrawal	appears stable
Zuni milkvetch	6 populations	no population estimates
Davidson's cliff carrot	no known populations	unknown

**8. Population and Habitat Trends of Management Indicator Species**

Population and habitat trends of management indicator species are summarized in Table 3.

Table 3 – Trends of Management Indicator Species

Management Indicator Species	Population Trend	Habitat Trend
yellowbellied sapsucker	downward	decline in aspen stands
house wren	slightly upward	slightly upward as riparian areas improve
plain titmouse	stable	piñon/juniper and oak stable
red-breasted nuthatch	stable to slightly increasing	spruce/fir habitat is static
pygmy nuthatch	slightly downward	ponderosa pine stands are overstocked
hairy woodpecker	stable	slightly upward as riparian areas improve and cottonwood regenerates
long-billed curlew	no known sightings	unknown
Merriam's turkey	stable to upward	slowly improving as riparian areas improve and meadows are maintained
Rio Grande turkey	stable	stable
mule deer	steadily upward on all mountain units except:  stable low on Mt. Taylor RD  downward in "unlimited" hunting units of Magdalena RD	improving browse conditions  forage is poor and acres of aspen are declining  downward
elk	steadily upward	upward as water is becoming more available and forage production is improving
white-tailed deer	steadily upward	stable
bobwhite quail	stable	stable

**Cultural Resources (Monitoring Items 1-2)**

**1. Listing of Cultural Resources In or Eligible for the National Register of Historic Places**

The Forest Plan requires annual inspection of cultural resources that are listed in, or eligible for, the National Register of Historic Places (National Register) in order to check for evidence of vandalism, pot-hunting, and/or undue deterioration. For purposes of monitoring this item, the term "eligible" is regarded as pertaining to only those resources that have been formally determined eligible for the National Register based upon a finding by the Keeper of the National Register. This monitoring item does not pertain to those hundreds of sites determined eligible by consensus determination (i.e. a simple agreement between the State Historic Preservation Office and the Forest Service). The Cibola National Forest and Grasslands have no sites that have been determined to be formally eligible. Thus, no such sites were inspected in FY99. There are three sites, however, on the forest which are listed on the National Register: Big Bead Mesa site, Mt. Taylor RD; Sandia Cave, Sandia RD; and Gallinas Springs site, Magdalena RD.

The major portion of the Big Bead Mesa site is on Bureau of Land Management land with a minor portion being situated on adjacent National Forest land. The site was last visited in the summer of 1998, but it was not possible to inspect all parts of the site. No evidence of vandalism, pot-hunting, or undue deterioration was noted at that time.

Sandia Cave is a visitor developed, interpreted site that is constantly visited and inspected by ranger district personnel as standard operating procedure. There are no reports of vandalism or damage to the cave.

Inspection of the Gallinas Spring site in FY99 disclosed no evidence of vandalism or pot-hunting, but there is a concern about increasing deterioration of walls within the site that have been exposed in past excavation projects.

**2. Clearance Surveys**

The Forest Plan and other regulations require completion of clearance documentation on all resource management activities having the potential to disturb cultural resources. All Forest Service authorized projects carried out during FY99 received the necessary clearance documentation prior to initiation. However, one project implemented in FY99 caused ground-disturbing activity that disturbed a cultural resource site. The Forest Archaeologist visited the site and mitigation was provided.

In 1998 two incidents of unauthorized, illegal ground-disturbing projects occurred. They did not get reported in last year's monitoring report because the documentation had not been received in the Supervisor's Office by the time the FY98 monitoring report was prepared. In one case, on the Magdalena RD unknown persons carried out illegal excavations at two archaeological sites. In the other case, on the Mt. Taylor RD a mining company carried out road maintenance and construction work without the knowledge of, or authorization from, the Forest Service. The Agency has no way of controlling projects done by non-Forest Service persons or organizations without authorization. These two projects are not regarded as out-of-compliance undertakings, but simply as incidents of unauthorized activity.

## **Lands (Monitoring Items 2, 4)**

### **2. Effects of Management Activities on Non-NF Lands to NF Lands**

The Plan requires that the forest report on the effect that management practices conducted on adjacent or intermingled non-National Forest lands have on the goals and objectives of the Forest Plan. The L-Bar quiet title lawsuit (Caprock Pipe & Supply v. USA) continues on the Mt. Taylor Ranger District. The Forest Service continues to act in the public's interest to protect public access rights and has not agreed to vacate the existing road easements in the checkerboard ownership with the L-Bar. Short-term management controls over public use of the area are consistent with long-term management goals found in the Forest Plan.

The Sandia Pueblo's title claim ruling has caused land adjustment plans within the claim area of the Sandia District to be put on hold. All other management activities by the Sandia RD in the title claim area are unchanged and are maintained under current direction until title to the claim area has been officially resolved.

Forest managers review requests made to Bernalillo and Sandoval County Planning and Zoning Departments that involve proposed subdivisions adjacent to the Forest boundary.

Subdivision developments adjacent to National Forest lands have the potential to result in encroachments onto the National Forest. Eight miles of forest boundary were surveyed on the Sandia, Mountainair, and Magdalena Districts, some of which have resulted in the discovery of encroachment. The Forest is pursuing resolution of these cases.

These same subdivisions cause an increased concern regarding the risk of wildfire in the wildland/ urban interface. Fuel reduction projects are being planned and implemented across the Forest to respond to these concerns.

Lack of right-of-way across private land for traditionally used trails is an ongoing problem. On the Mountainair RD, the Bosque and Crest Trails are being re-routed because of unsuccessful attempts to acquire rights-of-way. On the Magdalena RD, Trail 25 was closed due to lack of right-of-way across private land. An alternate route has been established and construction is underway.

Forest managers on the Cibola have also participated in the Focus 2050 planning process, which is being facilitated by the Middle Rio Grande Council of Governments. This plan recognizes the need for open space and planned growth in Bernalillo, Valencia, Tarrant, and Sandoval Counties. This Forest has specifically identified the need for open space on the west side of the Manzano Mountains adjacent to the National Forest boundary.

### **4. Effects of Management Activities on NF Lands to Non-NF Lands**

The effects of the goals, objectives and management of the forest on adjacent, intermingled and surrounding non-National Forest lands are required to be reported in FY99. Caprock Pipe and Supply and the Forest are preparing an Environmental Assessment to consider a proposed land exchange. Completion of this land exchange with the L-Bar Ranch should benefit both private landowners and the National Forest. Consolidation of the checkerboard area on the Mt. Taylor RD will allow landscape-scale resource management to occur in that area.

Acquisition of Phase III of the Tres Pistolas parcel consolidated lands adjacent to the Sandia Mountain Wilderness. This was the third and final phase of the purchase. Tres Pistolas open space was also acquired by the City of Albuquerque in partnership with the Forest.

The Coyote Springs road easement across private land adjacent to the Sandia RD was vacated, as it no longer provides access to lands needing management by the Forest Service. The National Forest lands once accessed by the Coyote Springs Road are in a military withdrawal area and alternate access is available.

Construction on FR 50 on the Mt. Taylor RD continues with Phase I now completed. This project has improved access to both the Forest and to many parcels of private land within the forest boundary. Four temporary construction easements were acquired for the FR 50 construction project.

Many roads across the National Forest serve local and County interests, and are frequently maintained by County road departments, whether authorized or not. Mountainair RD personnel are preparing to issue easements to Lincoln County for 40 miles of roads that are currently without authorization. This will formalize the existing situation.

The Forest converted three Special Use Road Permits to easements. These easements were granted to the State of New Mexico for State highways; one on Sandia RD and two on Mountainair RD.

Black Kettle National Grassland managers receive complaints from adjacent landowners during hunting seasons regarding hunters trespassing on private land. While hunting is a viable use of the National Grassland, trespassing on private lands is an inherent problem. To date there have not been enough personnel available to patrol all the Grassland boundaries during hunting season.

The Monica land exchange is nearing completion and should be finalized in FY2001. This exchange will have limited impact on adjacent lands; in fact, uses of the land will remain essentially the same. The exchange will, however, prevent future conflicts with the development of wildland/urban interface.

## **Protection (Monitoring Item 2)**

### **2. Insect and Disease Infestations**

Insect and disease occurrences on the mountain districts of the Cibola National Forest were recorded using aerial reconnaissance during the late summer of 1999 by a Regional Office team.

The results of the aerial reconnaissance indicate the continuance of a chronic western spruce budworm infestation on the Mt. Taylor RD that has been underway for approximately 15 years. This infestation continues to adversely affect the vigor and resiliency of the spruce-fir forest type on Mt. Taylor, as well as adding to the existing fuel loading through tree mortality.

The aspen forest type on the Mt. Taylor RD experienced a fourth year of defoliation by the western tent caterpillar. While these trees continue to re-establish their foliage by each July, four consecutive years of this defoliation are beginning to take a toll on the vigor of this important forest tree component.

Forest-wide infestations of dwarf mistletoe in conifers continue to affect an estimated 30 to 40% of the area. This

parasite adversely affects tree vigor on both an individual tree and on a landscape basis.

While other insect and disease conditions occur across the Forest, none have reached the epidemic stage. In fact, forest managers have come to appreciate the importance of low levels of insect and disease activity in the forested ecosystems.

## **C. OTHER MONITORING**

The following summary of project-level monitoring is representative of a portion of the monitoring that was conducted in the field on the Cibola National Forest and Grasslands in FY99.

### **Monitoring Partners**

A survey of hunters was conducted on the opening morning of rifle deer season on the Black Kettle National Grassland in cooperation with the Oklahoma Department of Wildlife. The survey found that there was one hunter for every 54 acres of the National Grassland.

A winter bird survey and a breeding bird survey were completed on the Black Kettle National Grassland with the cooperation of the Upper Washita Conservation District.

Kiowa and Rita Blanca National Grassland managers have been working with the Rocky Mountain Research Station to determine the effects of prescribed burning on various grassland vegetation types. This work is ongoing and has not resulted in any conclusions yet.

Sandia and Mountainair Ranger Districts are cooperating with HawkWatch to conduct monitoring trends and inventory raptor populations. The Manzano survey is conducted during the fall migration, while the Sandia survey is held during the spring migration. Kirtland Air Force Base and the Sandia Ranger District have and will continue to monitor species of concern on the military withdrawal area.

The Magdalena RD utilizes the services of multiple partners to monitor threatened, endangered, and other wildlife populations. In 1999 these partners included: Rocky Mountain Research Station, University of New Mexico, New Mexico State Forestry, New Mexico Game and Fish Department and multiple volunteers. District personnel worked with volunteers to monitor Mexican spotted owl Protected Activity Centers (PACs) to determine occupancy and reproductive status. New Mexico Game and Fish assisted with monitoring one of the peregrine falcon eyries. Rocky Mountain Research Station personnel discovered a northern goshawk pair in an area not previously known to

be occupied by the birds. New Mexico State Forestry worked with District personnel to monitor populations of Zuni fleabane. They determined that there has been no decline in population, and they discovered three new locations of the plant.

## **Wildlife**

A breeding bird survey was completed for the Kiowa and Rita Blanca National Grasslands in FY99. It would be valuable for this survey to be continued into FY2000. Other surveys are underway on the Kiowa and Rita Blanca National Grasslands and also need to be continued. These include surveys for ground nesting birds, swift fox, raptors, and neotropical birds.

## **Soil and Watershed**

The implementation of best management practices on soil and watershed projects on the Cibola National Forest and Grasslands was monitored during 1999. This annual report is sent to the State of New Mexico and includes 24 projects like spring and meadow exclosures, revegetation, meadow restoration, bank stabilization, road closures and relocations, and tamarisk control.

## **Range**

Approximately 235 allotments were inspected for permit compliance, forage utilization levels, and general resource conditions. In addition, three inactive allotments were monitored for unauthorized livestock use or other unauthorized activities. Robel pole monitoring was conducted on eleven allotments for determining vegetation structure.

Several range improvements were monitored for implementation and compliance with installation/construction requirements. These projects included one trick tank, over 34 miles of fence, over two miles of water pipeline, thirteen stock tanks, two redrilled wells, and seven other water developments.

Approximately 400 acres of juniper woodland were treated to remove overstory and improve forage. Of these, 300 acres were treated with shears in a thinning operation, and 100 acres were treated with prescribed burning.

## **Tribal Consultation**

One of the keys to making land use planning and project implementation effective is to bring American Indian concerns into these processes from the very outset and to consider them fully at each stage of analysis and decision-making. The Forest has an established consultation program and consults with 26 tribes who consider lands that the Cibola now manages as their traditional use areas. Many of these tribes attach religious or cultural significance to sites on these lands. The purpose of the consultation is to determine if there are traditional sites that have the potential to be affected by a Federal project.

Each year the Forest sends each tribe a letter and list of ongoing and proposed projects and planning efforts. Follow-up meetings are then held with the tribes. The district rangers play a key role in the consultation, as they are the primary contacts for the tribes that control neighboring lands. Meeting with the tribes provides the rangers an opportunity to discuss the districts' program of work, to solicit input regarding projects, and to discuss topics of mutual interest that relate to the management of Federal lands and resources.

## **Recreation**

Kiowa National Grassland monitored recreation users in Mills Canyon in 1999. Feedback sheets were made available for recreationists to fill out after visiting Mills Canyon. The District received 111 responses on the feedback sheets. Of these responses, 73 indicated that the canyon should be left the way it is now.

## **Fire**

Two prescribed fires were accomplished on the Magdalena RD this past year. They were the Fisher Burn and the Kellog Burn. A total of 737 acres were prescribed for the Fisher Burn, while only 457 acres actually burned. For the Kellog Burn 206 acres were prescribed and 206 acres were actually burned.

Objectives of the Fisher Burn were to reduce one-hour fuels by 75% (70% accomplished), reduce ten-hour fuels by 60% (30% accomplished), reduce 100-hour fuels by 15% (8-10% accomplished), and reduce 1,000-hour fuels by 10% (5% accomplished.)

Objectives of the Kellog Burn were to remove 80-90% of understory (80% accomplished), remove 50-90% of piñon/juniper (25% accomplished), and to remove 30-40% of diseased ponderosa pine (15% accomplished.)

## Minerals

Oil and gas pipelines were monitored in FY99 to insure that the correct company owning the pipeline was under permit. Approximately six pipelines were discovered to have changed ownership and permit changes are underway.

In addition, twenty one oil and gas wells were monitored in FY99 to check for proper surface operations and any new ownership of wells.

## D. PROGRESS IN MOVING TOWARD DESIRED CONDITIONS

Throughout 1999 teams of Forest and District personnel worked to verify and modify the Desired Conditions set out in the existing Forest Plan. This was done as part of the Forest and Grassland Plan Revision process and incorporated public comments received over the past few years. In only a few instances did the teams determine that desired conditions identified in the Forest Plan were no longer appropriate. In most cases, the current desired conditions were confirmed and made more specific. These updated desired conditions will be used further in the process of revision of the Forest and Grassland Plans and can be found in the Geographic Area Assessments for the Mt. Taylor, Mountainair, Sandia, and Kiowa/Rita Blanca Ranger Districts.

Monitoring has shown that the Forest and Grasslands are moving toward desired conditions (goals) set out in the current Forest Plan in most areas that were monitored in FY99. These included the five resource categories described earlier: timber, wildlife, cultural resources, lands, and protection.

The following resource headings list the goal from the 1985 Forest Plan and the way in which monitoring in FY99 has addressed that goal.

### Timber

"Manage all timber resources, both commercial species and piñon-juniper woodlands, to provide a sustained yield of wood fiber. Apply technology to improve productivity of stands and coordinate timber management with other resource considerations."

#### Monitoring Results:

The outstanding acreage needing reforestation activity continues to decline as past timber harvest areas are treated and certified as meeting reforestation standards. Reforestation activities now are generated, for the most

part, by wildfires. Acres reported as needing reforestation in FY98 were 74. The current condition of 39 acres remaining in need of reforestation reflects a 47% decrease in acreage and continued movement towards the Forest Plan objective of no areas needing reforestation.

A 43% reduction of areas identified as needing timber stand improvement in FY98 was realized in FY99. However, our progress in moving toward the desired condition is very slow because crowded conditions continue to dominate much of the forested landscape. The acres reported under this monitoring element represents those timber stands that have been analyzed through the NEPA process and were subsequently identified as being in need of timber stand improvement. Extensive areas of the Cibola NF consist of overcrowded forest conditions that have not been adequately inventoried or processed through the NEPA process and remain in need of treatment.

The objective of the Plan was an allowable sale quantity (ASQ) of up to 8,300 MBF, or average proposed annual sales of 6,300 MBF. The FY 99 offering of about 92 MBF of sawtimber is not sustaining our future wood fiber production and coming nowhere close to the objective set out in the Forest Plan. As shown in the chart below, the actual volume of sawtimber offered for sale since the Forest Plan was signed has been below the ASQ and at severely reduced rates since 1996. The lack of any sales of sawtimber in FY96 is due to a court-ordered injunction on timber sales.

FY86-90 (average)	7,040 MBF
FY91-95 (average)	2,980 MBF
FY96	0 MBF
FY97	160 MBF
FY98	198 MBF
FY99	92 MBF

The Forest currently has no outstanding regeneration harvest areas still in need of reforestation. We have achieved our objective of adequately regenerating past harvest areas that needed reforestation.

Of the four items monitored under the timber management category in FY99, the Forest has met the desired condition in one of them, is moving toward the desired condition in one of them, and is not progressing toward the desired condition in two of them.

### Wildlife

"Manage for a diverse, well distributed pattern of habitats for viable populations of wildlife and fish species in cooperation with states and other agencies. Apply technology and manage habitat to help recover threatened and endangered species and increase the productivity for

existing native and desired non-native vertebrate species consistent with other resource considerations. Resist introduction of exotics."

### **Monitoring Results:**

Monitoring of threatened, endangered, and/or sensitive animals and plants revealed no decreasing populations or downward trends in habitats. However, there are data gaps, which suggests that we need to expend more time and effort in monitoring to obtain a true picture of the effects of our activities on T&E species.

Monitoring of the management indicator species showed variances between districts and has been sporadic and anecdotal. Assumptions are often made on the basis of habitat condition, without actual observation of the MIS of concern. Of course, monitoring of habitat is easier and cheaper because the habitat doesn't move. Furthermore, long-term habitat trends are probably more reliable indicators of management than presence or absence of wildlife species. Plant and animal populations can fluctuate widely in response to a number of factors that may not be remotely related to our management activities. Most of the population trends noted were related to habitat quality/quantity trends, which are the result of past management on the districts. Specific conditions leading to the habitat and population trends follow.

*Yellowbellied Sapsucker* – The population trend is downward where there are aspen stands in decline across the Forest. As aspen stand improvement projects are implemented the trends will likely be stable to upward.

*House Wren* – As riparian areas on the Forest are improved, habitat for this species improves. The trend for this species and its habitat is slightly upward.

*Plain Titmouse* – The population trend for this species is likely stable due to the steady state of piñon/juniper and oak habitat. The existing abundance of cavities in older stands of piñon/juniper is particularly important to the viability of this species.

*Red-breasted Nuthatch* - On the Sandia and Magdalena Districts, the population trend is likely stable to slightly increasing due to the static state of the spruce/fir habitat, which is not being affected by insect and disease infestation or timber harvests.

*Pygmy Nuthatch* – The population trend for this species is slightly downward due to overstocking of ponderosa pine stands throughout the Forest. Most ponderosa pine stands are overstocked, lacking the open, park-like conditions favored by this species. Recent thinning projects may improve local conditions for the pygmy nuthatch.

*Hairy Woodpecker* - The population trend in bottomlands is probably stable but will likely decline in the next few years as old remnant cottonwood stands die out. The long-term prognosis is good, as improved riparian conditions are providing cottonwood regeneration. In other habitat types, the trend is stable due to the low intensity of timber management and the adequate supply of snags for nesting.

*Merriam's Turkey* - Overall turkey populations are increasing on the Mountainair RD and stable on the Magdalena RD. Recent reintroductions of turkey in the Manzano and Gallinas Mountains have been successful. Habitat is improving with water developments, riparian improvements, the creation of forest openings, and maintenance of meadows. Merriam's turkey is commonly sighted in the Manzanitas Mountains where habitat is also being improved. On the Magdalena RD populations seem especially susceptible to drought conditions and fluctuate widely as a result.

*Rio Grande Turkey* – Monitoring indicates that the population and habitat trends for Rio Grande turkey are stable. The habitat health is such that there are adequate numbers of turkeys for both hunting and viewing.

*Mule Deer* - The population is increasing on Sandia Mountain due to several years of limited hunting permits and a restriction of firearms. Beginning in 1998, deer hunting was limited on the Manzano Mountains. That is resulting in an upward trend in mule deer populations. On the Zuni Mountains, populations are rebounding somewhat due to better moisture conditions. However, forest maturation, loss of browse, lack of ecological old growth, and maturation of trees planted by the timber program in former meadows is beginning to lower the ability to sustain the current wildlife population using the area.

Near Mt. Taylor, populations are still characterized as being stable and low with low reproduction/recruitment. This is possibly due to poor forage nutrition, habitat, declining acres, and an even-aged structure of aspen, density-dependency, possible disruption of a game metapopulation, lack in physical quality and quantity of fawning sites, lack of quantity of winter range, maturation of forests, and human disturbance. Increased deer populations on portions of the Magdalena District are attributed to tightly regulated rifle deer hunting on a large portion of the district and improving browse conditions through prescribed burning. However, in the "unlimited" hunting unit of Magdalena the population trend is downward due to heavy hunting pressure and a need for mule deer habitat improvement.

*Elk* - The population in the Zuni Mountains is slowly increasing, but hunting dates and gender strategy are keeping the increase at a minimum. Near Mt. Taylor, the population is still increasing, with hunting strategies and hunter success unable to keep elk numbers in check.

Recent large elk increases may be related to a decline of the mule deer herd, which carries an elk-limiting parasite. On the Magdalena District, increases in elk populations are attributed to increased availability of water through the wildlife and range programs and forage production improvements due to intensified range management and prescribed burning. Populations are increasing on the Gallinas and Manzano Mountains. Elk have recently been sighted in the Sandia Mountains and the population is believed to be stable.

*White-tailed Deer* - Monitoring indicates that the population trend is stable to upward and the habitat trend is stable. The habitat health is such that there are adequate numbers of deer for both hunting and viewing.

*Bobwhite Quail* - Monitoring indicates that the population and habitat trends are stable. Quail population fluctuations are due mostly to fluctuations in climate and precipitation.

Overall, we are heading toward the desired condition of the forest plan, but there are some downward trends in population/habitat that will require vegetation management to correct.

## **Cultural Resources**

"Inventory, protect, and where appropriate interpret cultural resources."

### **Monitoring Results:**

No sites were nominated or added to the National Register of Historic Places last year, which is satisfactory since this is done on an "as needed basis". Sites already in the National Register of Historic Places have been protected adequately, except for the natural deterioration in one site. This needs to be remedied as budgets or urgency allows.

All Forest Service undertakings (ground disturbing projects) received clearance surveys and concurrence from the State Historic Preservation Officer as required. However, during the implementation of one project, ground-disturbing activity inadvertently encroached on one cultural resource site. The Forest is close to meeting the desired condition of protecting all cultural resource sites but needs to stress to project managers, contractors, and permittees the necessity of keeping ground-disturbing activities out of site boundaries.

Monitoring shows that the forest is moving toward the desired condition in the Forest Plan for cultural resources.

## **Lands**

"Conduct landownership adjustment, right-of-way acquisition, land line location, and special use programs to promote efficient management."

### **Monitoring Results:**

The areas monitored in FY99 showed that the right-of-way program, land acquisition/exchange program, and road/trail management programs are being implemented and slowly moving toward the desired conditions in the Forest Plan.

Lack of right-of-way across private land for traditionally used trails is an ongoing problem. It is common for the Forest to use existing roads and trails without formal rights-of-way. This allows management in the short term to continue to provide access to recreationists. However, changes in ownership of private land can lead to the sudden loss of access. Planning for acquisition of rights-of-way and trail rerouting needs to be done to avoid the potential loss of access.

Some land acquisition plans on the Forest have progressed more slowly than expected, while others have been completed. The Sandia Pueblo title claim has caused land adjustment plans within the claim area of the Sandia RD to be put on hold until title has been resolved. Phase III of the Tres Pistolas parcel was successfully acquired in order to consolidate lands adjacent to the Sandia Mountain Wilderness.

As residential subdivisions continue to be developed adjacent to the National Forest boundary there is increased potential for new management issues to surface. Some of these include the potential for encroachment onto the National Forest, traditional access points to be blocked, new access points to be developed by users, and increased risk of wildfire. The number of residential subdivisions adjacent to the National Forest boundary is consistently increasing across the Forest.

Overall, the Forest is moving toward the Forest Plan's desired condition, but the progress has been slower than expected due to circumstances described above.

## **Protection (Insects and Diseases)**

There is no specific "goal" for this resource area in the Forest Plan. It is included under each resource that could be affected by insects or diseases. In the current Forest Plan, insects and diseases are looked upon as detrimental. However, a shift in thinking has taken place since the completion of the Plan. Insects and diseases are now seen as a normal part of the range of disturbance that exists in a healthy ecosystem.

### **Monitoring Results:**

Since the most desirable strategy for dealing with insect and disease activity is proactive silvicultural treatments that reduce forest susceptibility to an epidemic situation, our progress is severely lacking and ineffective. Large areas of western spruce budworm and western tent caterpillar continue to be classified at the “epidemic” stage. Dwarf mistletoe continues at moderate to severe infestation levels over much of the Forest. For the most part, the Forest response to adverse levels of insect and disease activity has been “after the fact” and usually too late to achieve any meaningful results. Proactive forest treatments, designed to reduce conditions favoring these insects or diseases, occurs on a much smaller scale than is needed.

While the Region does provide the Forest with aerial surveys with which insect and disease activity can be monitored, most management responses to this information occurs too late. Therefore, the Forest is not meeting the overall goals in the Forest Plan to prevent insect and disease infestation levels from moving from endemic to epidemic. Planning efforts in FY2000 that focus on landscape-scale assessments will, however, position the Forest to better respond to these infestations.

### **Range**

“Provide forage to promote sustained livestock yields. Maintain or improve range condition and coordinate livestock use with other resource considerations. Manage rangelands to reduce or minimize areas of overuse in order to achieve significant improvement of rangeland from unsatisfactory to satisfactory condition.”

-And-

“Promote the role of demonstrating grassland agriculture on the National Grasslands and the application to other land as specified in FSM 2202.1.”

### **Monitoring Results:**

Range monitoring, although not required to be reported in this year’s Annual Monitoring Report, was accomplished on many units. This monitoring indicates that permittees comply with permit conditions. Monitoring has revealed some unsatisfactory forage utilization levels, and modifications have been implemented to rectify these situations. Range improvement projects have been implemented according to plan and are improving rangeland conditions.

On the Kiowa and Rita Blanca National Grasslands, monitoring has revealed that ecological succession is

advancing on over 50% of the grazing units monitored. Some exceptions to this are grazing units with prairie dog towns.

Overall, resource conditions are satisfactory and we are moving toward desired conditions.

### **Fire**

“Provide a fire management program in cooperation with other agencies that allows a reasonable level of fire protection to reduce fire hazards and risks, prevent loss of life and property, minimize resource losses, and support other resource objectives.”

### **Monitoring Results:**

Prescribed burn monitoring indicated that all of the burn objectives are not being accomplished. The Forest needs to develop the ability to better predict and respond to burning “windows” to ensure that we have the conditions necessary to reach the objectives.

## **E. EMERGING ISSUES**

The following items are resource/social issues that are becoming more important each year and have the potential to change the forest’s management strategies.

### **Timber Management**

Direction to maintain “temporary” openings in the forested ecosystem conflict with current Forest Plan direction to promptly reforest suitable areas impacted by natural events (like wildfire) or planned activities (like clearcuts.) Forest managers have found that they would like to have the flexibility to allow deforested areas to remain in that condition for a longer period of time. In addition, the length of time required to properly analyze sawtimber offerings through the NEPA process has significantly lengthened. This has resulted in sawtimber offerings occurring only every two to three years. Loss of the timber harvest and milling industry has reduced the chance that any such offerings would be successfully awarded.

### **Threatened/Endangered/Sensitive Species (TES)**

As the number of listed TES species increases, the number of grazing allotments with TES habitats, including riparian areas, is increasing. This has affected range management and permittee operations.

Listing of species that have been petitioned for threatened or endangered status on the National Grasslands has the potential to change our current management practices. Some of these species have conflicting habitat requirements.

The US Fish & Wildlife Service is in the process of evaluating the lesser prairie chicken for threatened or endangered status. Attendance at interagency and various local meetings indicates a growing interest in having the Black Kettle National Grassland reestablish a viable population of lesser prairie chickens. If reestablished, the habitat requirements to maintain the population would likely go beyond the National Grassland boundary and into adjacent private lands. The District is implementing vegetation structure changes to favor the lesser prairie chicken through grazing and prescribed fire. The success of this effort lies in the cooperation between National Grassland managers and adjacent property owners.

The black-tailed prairie dog is also under evaluation for threatened or endangered status. This is a concern to National Grassland managers as well as adjacent landowners. Although there are no known prairie dog towns on the Black Kettle National Grassland, some do occur on adjacent lands. The District Ranger has been asked to be part of a task force set up by the State of Oklahoma to prepare a statewide plan for management of black-tailed prairie dogs. The Kiowa and Rita Blanca National Grasslands have a considerable number of black-tailed prairie dogs which, if listed may affect current management practices.

### **Cultural Resources**

Under a 1992 amendment to the National Historic Preservation Act (NHPA) sites of cultural and religious importance to American Indian tribes may be determined eligible for the National Register of Historic Places. Thus, timely compliance with the revised implementing regulations for NHPA (36 CFR 800) is emerging as a high profile issue. Due in part to the wide geographic dispersal of the Cibola National Forest and Grasslands, the Forest is required to consult with as many as 30 different Indian tribes, as well as numerous chapters of the Navajo Tribe. Since Indian consultation with tribes is now an integral part of Section 106 compliance, and must be completed before project implementation, the time frame for both project planning and decision-making will have to be substantially altered to accommodate tribal consultation.

### **Lands Management**

There are disputes over historic land titles with Sandia Pueblo and Isleta Pueblo. These title claims have the

potential to drastically alter land ownership patterns and public use of the lands in question.

Rights-of-way for access to the National Forest continues to be an issue.

### **National Grasslands**

As adjacent private lands are cultivated, the National Grasslands become an island of habitat for wildlife, recreationists, and livestock grazing. Fragmented land ownership patterns on the National Grasslands make large-scale wildlife habitat improvement projects difficult to implement in order to provide a benefit to the species. Future uses of the Grasslands may well be determined by events that are occurring on private lands. An effort to consolidate National Grasslands holdings should be considered in the Grasslands Plan Revision process.

Water availability is a growing concern as there are no declared water basins (water use is unregulated) in northeastern New Mexico (with the exception of a small amount of Harding County), Texas, or Oklahoma. Many new pivot irrigation systems have been installed on adjacent private land, especially in Texas and Oklahoma in the last few years. The Kiowa and Rita Blanca National Grasslands have had a number of wells go dry and may have more in the future. This may influence future land use activities on the National Grasslands.

### **Recreation**

Recreation use continues to increase on the Cibola. This provides a challenge for both the protection of the public and National Forest resources and property. Conflicts between recreation users such as motorcycles and horseback riders on a trail are on the increase. The growth of new types of recreational use has created additional pressure on management of National Forest lands and caused law enforcement needs to increase. Occupancy and use violations constitute a large percentage of the violations. Because of increased recreational use of the Forest, tort claim investigations primarily resulting from injuries are on the increase. While the primary jurisdiction of the State Police, search and rescue missions are occurring more and more frequently on National Forest lands and involving both Forest law enforcement and other District personnel.

### **Wildland-Urban Interface**

The miles of National Forest boundary that are considered wildland-urban interface areas continues to grow at a steady rate. As the population increases in these areas, our

task of managing the natural resources adjacent to these population centers becomes more complex. Issues include adequate law enforcement, danger of wildfire, wildlife entering residential areas, and National Forest access. Our involvement in other County, Agency, and organizational planning initiatives is increasingly critical.

## **F. BARRIERS TO EFFECTIVE MONITORING**

During the preparation of this year's monitoring report, it became evident that much of the current monitoring criteria is not moving us toward the direction of improved forest health. Other ways of monitoring activities that can demonstrate improved resource management are needed. This will be addressed in the Forest Plan revision and in the upcoming Monitoring Plan Amendment. Barriers mentioned by various forest personnel included the following.

### **Asking the Wrong Questions**

Items to be monitored are not always relevant to the program accomplishments or targets. We need to ask ourselves: What is important, relevant and meaningful (especially with changes in program emphasis)? It would be best to establish what is important and what it is that we want to know to make monitoring useful.

Some items are not practical and are difficult to measure. To be effective, monitoring methods need to be simple and easily implementable, while providing a true picture of progress toward an objective.

The Forest isn't always monitoring things that will determine arising problems in advance. There is a need to monitor for adaptive management, so changes can be made in on-going programs/projects as soon as potential problems are seen.

### **Lack of a Comprehensive Vegetation Inventory**

There is the lack of stand-level vegetation inventories and habitat requirements for TE&S species across the forest. The corresponding GIS (Geographic Information System) database is also not available for resource analysis. Therefore, there is not good baseline information to compare with for some monitoring results, (e.g., only 13 percent of the forested area of the Cibola National Forest has been inventoried to date.)

In some cases where the habitat requirements for species are not known, we cannot predict the populations and trends.

While aerial surveys provide an overall indication of serious insect and disease conditions, the ability to monitor site-specific, and less visible conditions has been compromised through the loss of skilled, "field-going" personnel and the lack of adequate forest vegetation inventory.

### **Public Concerns**

Social, economic and political items have not been identified as part of the current monitoring plan. Since these items have not been monitored, progress in responding to the public's wants and changing values cannot be measured.

### **Other**

The forest could be more efficient by tying monitoring back to those items we are accountable for on a regular basis. For example, INFRASTRUCTURE should provide a good foundation for information storage and retrieval.

Although the importance of monitoring is recognized forestwide, this importance is not reflected in terms of budget or work targets. Invariably, resources are not available to complete the necessary monitoring tasks.

## **G. FY2000 ACTION PLAN**

### **Monitoring Partners**

There is a need to continue and expand monitoring projects being accomplished with partnerships across the Forest and Grasslands. It is recommended that the districts use the successful ongoing monitoring and research partnerships as models to develop new partnerships.

By continuing to establish a strong and consistent program of consultation including monitoring with the tribes, the Cibola can expand and enhance its ability to care for the land and serve its people.

### **TE&S Amendment**

A Region-wide Environmental Impact Statement (EIS) for eleven Forest Plan amendments for new listings of Threatened and Endangered Species is scheduled for completion in 2000. The Cibola has only one species

involved in this EIS: the southwestern willow flycatcher. The amendments would add new standards that strengthen direction for the protection of federally listed threatened and endangered species. The amendment would apply to all subsequent project-level resource management decisions that will include site-specific environmental analyses and appropriate public involvement. The amendments will be reviewed again when plans are revised or new information becomes available.

### **Revision of Chapter 5 of the Plan**

The revision of the monitoring plan in Chapter 5 of the Forest Plan has been identified as a proposed amendment. The main focus of the monitoring plan revision is to incorporate changes in management direction, i.e., ecosystem management, Natural Resource Agenda, Southwest Strategy and Company's Coming. Since the monitoring plan's main purpose is to ensure consistency in implementing the Forest Plan, key monitoring questions and monitoring approaches need to be reviewed and updated. Validation and effective monitoring areas may be identified.

We should consider identifying monitoring as a standard work plan item for each program area, earmarking a dollar amount to be spent for monitoring alone. A well-defined monitoring plan should be an integral part of each planned activity, with standards and guidelines and monitoring parameters identified.

### **Resource Inventory Needs**

The Comprehensive Forest Inventory, which was started in 1997 by the Intermountain Research Station, is completed. The Forest expects to receive the data from this inventory in FY2000.

Field mapping of the Terrestrial Ecosystem Survey was completed on the Cibola National Forest during the 1998 field season. We expect to have the interpretive data available to us in FY2000.

To do a better evaluation of old growth, urban interface, and Threatened and Endangered Species issues, an accelerated schedule for Stage II Stand Exams will be needed. Presently, only 13 percent of the forest is mapped at this level, which includes information on stand structure and diversity. During 2000, Stage II stand exams will be conducted on approximately 29,000 acres of the Sandia, Magdalena, and Mountainair RDs. "Walk-thru" or low intensive, surveys will continue to be done where Stage II data is lacking and project needs occur.

To improve resource inventory data reliability and availability for Forest managers, Forest GIS and District personnel will be working to develop fifteen standard resource coverages in the GIS.

### **Cultural Resources**

In order to prevent future breaches of cultural resource site areas during construction of projects, the Forest intends to sponsor a series of training sessions. These internal sessions will be designed for employees who plan or implement ground disturbing projects and will focus on cultural resource compliance issues. This training may be expanded in the future to include permittees and contractors working on federal lands.

## **H. STATUS OF FY99 RECOMMENDATIONS**

### **Monitoring Partners**

The Black Kettle National Grassland was working on an ecological classification survey on lands in Oklahoma in FY98. This was a cooperative effort with Oklahoma State University and Rocky Mountain Research Station. The survey did not get completed in FY99 due to a lack of sufficient funds. The District will try again in FY2000 to get this survey completed, once they receive a final budget.

### **Amendments**

A Region-wide Environmental Impact Statement (EIS) for eleven Forest Plan amendments for new listings of Threatened and Endangered Species was scheduled for completion in 1999. The Regional Office was not able to complete the EIS in 1999 and it is now slated for a final decision in FY2000.

The need to prepare an amendment to delete Management Area 18 from the Forest Plan had been identified as a result of the timber monitoring in FY99. The amendment was not done in FY99 because of other higher priority planning projects on the Forest and Grasslands. The Forest Plan Revision Team has reevaluated the necessity for preparing this amendment prior to the Forest and Grassland Plan Revision completion. The team has determined that, in light of other planning projects needing to be completed in FY2000, this amendment is not a high priority and can be handled through the ongoing Forest Plan Revision effort.

## Revision of Chapter 5 of the Plan

The revision of the monitoring plan in Chapter 5 of the Forest Plan had been identified as a proposed amendment in FY99. The Forest Leadership Team has identified this amendment as a priority for FY2000 so the Forest Plan Revision Team will be working on completing this.

## Resource Inventory Needs

The Comprehensive Forest Inventory, which was started in 1997 by the Intermountain Research Station, continued in 1999. Data from this inventory has not yet been made available to the Forest. This information will help in the Forest Plan Revision process and will be used to augment the 1:24,000 scale Terrestrial Ecosystem Survey.

Field mapping of the Terrestrial Ecosystem Survey is completed on the Cibola National Forest but interpretive data has not been provided to the Forest yet.

To do a better evaluation of old growth, urban interface, and Threatened and Endangered Species issues, an accelerated schedule for Stage II stand exams was sought in FY99. The Forest was not able to accomplish any Stage II exams last year due to a low response to our Request for Bids.

## Cultural Resources

In order to prevent future breaches of cultural resource clearance areas during construction of projects, the Forest intended to sponsor a series of training sessions. These internal sessions did not occur in FY99 but are planned to be conducted in FY2000 if budgets allow.

# I. RESEARCH NEEDS IDENTIFIED

The document, "Prerevision Review Topics for the Cibola National Forest Land and Resource Management Plan" (September 23, 1996) lists several research topics that were discussed by the Cibola National Forest and Grassland interdisciplinary team, and that need to be considered. Those are listed below, along with other research needs identified in FY99. Research needs will be modified as monitoring indicates that research emphases need to shift.

## Piñon-Juniper

What types of treatments would best produce woodland shrub dominant communities and sustain true woodland

and juniper savannah communities along with balanced seral stages for each? What threshold of treatment should be observed to obtain, but not exceed the ability of the land to produce or sustain various piñon-juniper habitat types and seral stages? What configuration of treatment should be observed to minimize fragmentation of habitats left after treatment?

## Grassland Ecosystems

What are the different effects of fire on short grass, mixed grass, and shinnery oak vegetation types based on season of burning (growing season vs. dormant season)? What are the effects of season of burning on small mammals and invertebrates in short grass vegetation types? What are the management implications of the relationship between past land uses and current ecological conditions? Little or no inventory and research work has been done on playa lakes to date. Inventory is needed to make sound management decisions within the greater prairie ecosystem.

## Medicinal Plants and Other Forest Products

What types of management would best produce and maintain diverse forest communities which contain forest products such as piñon nuts, medicinal herbs, traditional use fibers, mushrooms, etc? What thresholds/methods of extraction should be allowed to be maintained, so as not to exceed the ability of the land to produce or sustain various forest products? What thresholds of extraction should be allowed to maintain at least minimum quantities of forest products for wildlife populations that must have these for survival?

## Mexican Spotted Owl

Continuing research by the Rocky Mountain Research Station regarding Mexican spotted owl will be invaluable in determining possible management practices to protect this species and its habitat, while accommodating other resource needs.

## Bats

Gather adequate information about bats and apply what is already known in management decisions that may affect them.

## **Stream Channel/Wet Meadows Restoration**

What are the common features (hydrologic, geologic, edaphic, biologic, topographic) of current and historic wet meadows located on the forest? What types of treatments are most effective for the restoration of degraded wet meadows and stream channels?

## **Bio-solids**

What are the effects and benefits of bio-solids application on National Forest System lands?

## **Range Management**

Holechek's grazing capacity model is being used throughout the Region, in various forms. Validation of this model on the various forests and ranger districts is necessary to determine the accuracy of the model. Of particular importance is research on browse utilization by livestock. The incidence and magnitude of noxious weed infestation is also vital in determining range conditions and possible management practices.

## **Recreation**

How much recreation use can landscapes absorb before the resource base begins to deteriorate? What are the acceptable limits of use in riparian areas and how can the effects of recreation activities be minimized? What kinds of recreation will be in demand on the forest and grasslands in the foreseeable future? Archive research is needed to address recreation management in a forest setting and provide evaluation of recreation facilities and interpretive services to determine how effective they have been and where adaptive changes are needed to meet management objectives.

## **Health Effects of Smoke From Prescribed Burning**

What existing research is available concerning the effects of smoke? What methods can be used to determine impacts of smoke on homes and people? What are the effects of smoke from prescribed fire used in the urban interface?

## **Social Impacts on Ecosystems**

What are the social impacts related to conflicting uses, subsistence uses, or capacity management on ecosystems? How can communications with Hispanic and American Indian communities be improved?

## **J. LIST OF PREPARERS**

### **Forest Supervisor's Office**

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### **Magdalena Ranger District**

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Dan Bastion, District Wildlife Biologist  
Lorene Guffey, District Recreation/Fire Staff  
Kevin Sanchez, Range Specialist

### **Mountainair Ranger District**

Beverly deGruyter, Zone Wildlife Biologist  
Don Hall, Zone Lands/Special Uses Staff

### **Sandia Ranger District**

Beverly deGruyter, Zone Wildlife Biologist  
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### **Black Kettle and McClellan Creek National Grasslands**

Reggie Blackwell, District Ranger  
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Bryan Hajny, District Wildlife Biologist

### **Kiowa and Rita Blanca National Grasslands**

Anthony Miller, Acting District Ranger  
Darrell Musick, District Range Staff  
Jimmy Hall, Range Specialist  
Jane Murray, District Business Management Officer

## **K. SUPPORTING DOCUMENTATION**

### **Timber**

- ◆ Rocky Mountain Resource Information System (RMRIS)
- ◆ Periodic Timber Sale Accomplishment Report
- ◆ Timber Cut and Sold on National Forests Report
- ◆ Forest and District Records

### **Wildlife**

- ◆ Forest and District Records
- ◆ 1999 Breeding Bird Survey Report
- ◆ Site Monitoring Plan and Eyrie Monitoring Reports
- ◆ Spring 1999 Raptor Migration Study in the Sandia Mountains of Central New Mexico

### **Cultural Resources**

- ◆ Forest and District Records

### **Lands**

- ◆ Forest and District Records

### **Protection**

- ◆ Forest Geographic Information System (GIS) database

### **Soil and Watershed**

- ◆ Soil and Watershed Improvements and Best Management Practices Implementation Report for FY99

### **Range**

- ◆ Forest and District Range 2210 and 2230 files
- ◆ Kiowa and Rita Blanca National Grasslands Geographic Area Assessments

### **Tribal Consultation**

- ◆ Forest and District Records

### **Recreation**

- ◆ Forest and District Records

### **Fire**

- ◆ Forest and District Records

### **Minerals**

- ◆ Forest and District Records

## **L. PUBLIC PARTICIPATION PLAN**

### **Background**

The Cibola National Forest Land and Resource Management Plan (Forest Plan) outlines a course of action for the management of the Cibola National Forest and Black Kettle, McClellan Creek, Kiowa and Rita Blanca National Grasslands. One of the requirements of the Forest Plan is a commitment to monitor and evaluate how well the plan is being implemented. The 1999 Annual Monitoring and Evaluation Report summarizes the results of monitoring and evaluation that was scheduled in Fiscal Year 1999.

### **Goal**

- To share information and make available to all interested parties the 1999 Annual Monitoring and Evaluation Report for the Cibola National Forest.

### **Objectives**

- Provide the Monitoring and Evaluation Report in a clear, concise manner that is easily understood by target audiences.
- Insure key forest employees are available to supply additional information after the monitoring report is released.
- Insure that interested individuals are aware of the availability of the monitoring report.

### **Audience**

- Cibola National Forest Plan Mailing List
- Congressional Delegation
- Local City and County Officials
- Interested Federal and State Agencies
- Local Media
- Forest and Regional Employees

### **Planned Actions: March 2000**

- Monitoring report is printed.
- Cover letter and monitoring report is sent to Forest Plan mailing list.
- News release is sent to local media (50+ television, radio and newspapers).
- Cover letter and monitoring report is sent to congressional delegation, local city and county officials, and interested agencies.
- Internal memo is sent to forest employees, regional office, other forests.