



United States  
Department of  
Agriculture

Forest  
Service

**Southwestern  
Region**

2005



# **Values, Attitudes and Beliefs toward National Forest System Lands: The Santa Fe National Forest**

**Prepared for:**

**The Santa Fe National Forest  
1474 Rodeo Road  
Santa Fe, NM 87505  
and**

**USDA Forest Service Region 3  
Southwestern Region  
333 Broadway SE  
Albuquerque, NM 87102**

**Submitted by:**

**John C. Russell, Ph.D.  
Peggy A. Adams-Russell**

**Adams-Russell Consulting  
1688 Springvale Road  
Placerville, CA 95667**



# Contents

Acknowledgements.....	iii
Executive Summary .....	1
Background.....	5
Methods and Data Collection.....	5
Data Processing and Analysis.....	6
Context: The Forest and Socioeconomic Setting.....	8
Results.....	13
Planning Environment .....	13
Resources and Multiple-Use .....	26
Needs for Change and Desired Conditions Themes .....	40
References.....	55
Appendix.....	57
Topic Areas for Discussion.....	57

## List of Tables

Table 1: Region 3 Forests Ranked by Total Area.....	8
Table 2: Santa Fe National Forest.....	10

## List of Figures

Figure 1: Santa Fe National Forest Counties .....	9
Figure 2: Percentage of Project Area Population by County .....	11



# Acknowledgements

Allen Fowler and Robert Potts, and other staff of the Santa Fe National Forest assisted in the identification of participants and the organization of meetings to complete this work. The authors are thankful for their assistance and support. Citizens who participated in discussion groups and interviews deserve special thanks for volunteering their time and insights about the uses and resources of the Santa Fe National Forest. These types of contributions enrich the pool of information available to plan for the future of the Santa Fe National Forest. Reuben Weisz, Richard Periman, and other Regional Office staff provided comment and review on study products. They are also working to use the findings of this project to improve the process of forest planning. The authors are thankful for their assistance and support.



# Executive Summary

## Background

This document reports on the results of a project to identify values, attitudes, and beliefs (VAB) about forest resources and their management for all national forests and grasslands in the Southwest Region (Region 3), including the Santa Fe National Forest. Results of this work are intended to assist forest managers and planners to identify strategic issues for revision of the existing Forest Plan and to assess other social and cultural factors that may influence forest planning and management. This VAB information is part of a suite of socioeconomic and cultural information available to the Santa Fe National Forest, including a socioeconomic assessment completed by scholars at the Bureau of Business and Economic Research at the University of New Mexico (Bureau of Business and Economic Research 2006).

A discussion group or focus group (Morgan 1997) methodology was used to identify values, attitudes, and beliefs concerning the Santa Fe National Forest (SFNF) and its resources. Additionally, some individual interviews were conducted with persons who were unable to attend the discussion group sessions or who requested an in-person interview when contacted to participate in the discussion groups. Participants were selected for these groups by discussions among District Rangers, forest planning staff, and other staff of the Santa Fe National Forest. The intent was to select participants with a range of perspectives about forest management issues by identifying individuals with knowledge about their community or forest management issues. This targeted sampling approach (Bernard 1995; Morse 1998) is not intended to result in participants who are “representative” of their communities. Instead, the intent is to identify persons who use forest resources or who are informed about forest management and community issues. The interviews and discussion sessions were focused by a discussion guide (see Appendix) that includes topics about the social environment, forest characteristics, the use of forest resources, values and benefits associated with forest resources, desired futures, and assessments of issues for Forest Plan revision.

Discussion groups were held in Espanola, Cuba, Las Vegas, and Jemez. Ten persons were invited to the Espanola meeting, eight persons for the Cuba location, fifteen persons for the Las Vegas meeting, and seven persons for the Jemez meeting location. Approximately, forty persons comprised the total for the discussion groups for the Santa Fe National Forest. These individuals represented local and state government, grazing associations, environmental groups, ranching interests, recreation users, off-highway vehicle users, utility and mining interests, outfitters and guides, economic and community development interests, and conservation groups. Additionally, six individual interviews were conducted with persons who were identified as having environmental, wood products, recreation, local business, and community interests.

Discussion group and individual interview data were coded using qualitative analysis methods that combined the use of predefined and emergent codes (Strauss 1987; Strauss and Corbin 1998). The predefined codes correspond with the discussion guide categories and the emergent codes were developed from participant statements that did not correspond with the predefined categories. Major categories for presentation were then constructed and issues were grouped within these categories for presentation in this report. The result is themes that address the planning environment, resource and multiple-use, and assessments of needs for change and desired conditions.

## **Planning Environment**

Forest planning and management occurs in the context of social, economic, political, cultural, and ecological conditions and trends. The configuration of these factors can influence what topics are identified as requiring management attention, desired solutions to identified issues or problems, and how publics choose to participate or not in planning and collaboration activities. For the purposes of this discussion, four factors were identified as affecting the planning environment: the social setting, attitudes, values, and beliefs about Santa Fe National Forest management, assessments of Forest Service policies and procedures, and sidebar issues.

- Five interconnected themes were identified about the social setting of the Santa Fe National Forest: (1) population growth and its interactions with forest uses and conditions; (2) the importance of community-forest connections for quality of life; (3) social and cultural diversity and its influence on the meanings of forest resources; (4) changes in stewardship values and beliefs; and, (5) ongoing changes in the socioeconomic relationship of communities with national forests, especially the emergence of recreation as a primary use of forest resources.
- Other reports completed for other Region 3 national forests identify beliefs and expectations about management actions and issues (e.g., Russell and Adams-Russell 2005). Data from the discussion groups for the Santa Fe National Forest contain similar themes about management issues specific to the SFNF and others that appear to be agency-wide. The SFNF-specific topics include concerns about archaeological bottlenecks, “thick bureaucracy,” communication, and community awareness.
- Participants expressed beliefs and expectations about Forest Service policies, procedures, and agency culture. These beliefs have implications for public trust in agency ability to manage federal resources and the ability to develop plans and work effectively with interested publics. The themes identified in the data include assessments of bureaucratic effectiveness; the effects of budget limitations and insufficient personnel; monitoring and data needs; a perceived disconnect between forest conditions and decision making; loss of Forest Service expertise and experience; a focus on bureaucratic process rather than project completion; and, the effects of staff rotation on community relationships.
- Sidebar issues identify issues and assessments that affect public evaluations of forest management, but they are not usually part of the forest planning and decision making process. Sidebar issues identified in the discussion group and interview data include the Endangered Species Act and its interaction with management of the Santa Fe National Forest; the implementation of the National Environmental Policy Act, particularly the need for more timely responses to time-critical issues, and the effects of laws suits and special interest groups on decision making and overall forest management and planning.

## **Resource and Multiple-Use**

Participants were asked open-ended questions and follow-up probes regarding the values and benefits of forest resources and the types of uses of forest resources. Themes regarding the benefits and values of SFNF resources include aesthetic benefits; biodiversity as an asset of forest resources; the benefits of cultural and subsistence uses of forest lands and resources; the economic benefits to communities of the SFNF; concerns about noxious weeds; the value of roads and trails; timber as a forest resource and liability; the value of the forest watersheds in

water production and maintaining water quality; wildlife habitat; and wilderness and roadless areas. The themes about multiple-use include assessments of the viability of multiple-use; user types and land ethics; access and fees for access; cultural uses of forest resources; recreation; off-road vehicle use; the transition from traditional uses such as timber and grazing to primarily recreational uses; and, the costs and benefits of timber and grazing uses.

### **Needs for Change and Desired Conditions**

Information about the perceived needs for change and desired conditions for the future of the Santa Fe National Forest are organized into the same categories as other values, beliefs, and attitudes information: the planning environment; resource issues, and multiple-use issues. Issues identified as needs for change in the planning environment include a desire for more flexibility in forest planning and decision making; an emphasis on using monitoring and data in a transparent decision making process; developing partnerships with interested parties to respond to the perceived limitations of the agency to meet the demands of forest management; and a focus on collaboration in future planning and decision making activities. Resource issues include recognition of the need for adaptable fire management plans; emphasizing forest health as the cornerstone for future management; developing alternative approaches to using herbicides or other chemical approaches to responding to noxious weed problems; maximizing management practices that respond to the needs for water supply and quality; attending to wildlife habitat issues, especially those concerning threatened or endangered species; and assessing the costs and benefits of expansion of wilderness and roadless areas. Themes regarding needs for change in multiple-use activities include access issues, including rights-of-way to ensure access to forest resources; attention to custom and culture in decision making; consideration of the social and economic benefits and tradeoffs of the commercial use of forest resources; responding to a perceived decline in land ethics that results in problem behaviors; law enforcement needs; and, the benefits and trade-offs of timber harvesting and grazing on the Santa Fe National Forest.



# Background

This document reports on the results of a project to identify values, attitudes, and beliefs (VAB) about forest resources and their management for all national forests and grasslands in the Southwest Region (Region 3), including the Santa Fe National Forest. Results of this work are intended to assist forest managers and planners to identify strategic issues for revision of the existing Forest Plan and to assess other social and cultural factors that may influence forest planning and management. This VAB information is part of a suite of socioeconomic and cultural information being assembled for planning purposes. Scholars at the Bureau of Business and Economic Research at the University of New Mexico are preparing a comprehensive socioeconomic assessment for all New Mexico national forests, including the Santa Fe National Forest (Bureau of Business and Economic Research 2006). Additionally, the Rocky Mountain Research Station is preparing a survey for Arizona and New Mexico residents that will provide forest-specific and region-wide population based information about forest resource and management issues. This collection of information provides forest managers with forest-specific data to compare with similar state and regional data.

The VAB information presented in this document provides a different set of information than either survey or socioeconomic assessment data. This information was collected and synthesized to identify local perspectives about key issues and concerns about forest resources and management. These perceptions and assessments of participants may be factually correct or in error, but most importantly they portray local perspectives from selected individuals that frame issues and imply solutions relevant for forest management and planning. The VAB information may also be used in conjunction with socioeconomic data to understand issue amplification, assessments of agency effectiveness, or other relevant factors affecting public evaluation of forest planning and management. Similarly, the VAB results were used by researchers at the Rocky Mountain Research Station as one source of information to formulate the content of the population-based survey to be implemented in the near future. The information from this work thus offers a local perspective about key issues from concerned publics that can be placed within a broader context of information about the social environment for the Santa Fe National Forest.

## Methods and Data Collection

A discussion group or focus group (Morgan 1997) methodology was used to identify values, attitudes, and beliefs concerning the Santa Fe National Forest and its resources. Additionally, some individual interviews were conducted with persons who were unable to attend the discussion group sessions or who requested an in-person interview when contacted to participate in the discussion groups. Participants were selected for these groups by discussions among District Rangers, forest planning staff, and other staff of the Santa Fe National Forest. The intent was to select participants with a range of perspectives about forest management issues by identifying individuals with knowledge about their community or forest management issues. This targeted sampling approach (Bernard 1995; Morse 1998) is not intended to result in participants who are “representative” of their communities. Instead, the intent is to identify persons who use forest resource or who are informed about forest management and community issues. This approach should result in information from those who have direct knowledge about needs for change and desired futures. This information can also be used to develop questions for future surveys using a sampling strategy to produce results representative of adjacent communities.

The interviews and discussion sessions were focused by a discussion guide (see Appendix) that includes topics about the social environment, forest characteristics, the use of forest resources,

values and benefits associated with forest resources, desired futures, and assessments of issues for Forest Plan revision. The social environment and forest characteristics topics provide some context to interpret the content of other discussion topics. The social environment discussions were oriented to information how the social environment has changed since the last Forest Plan. The forest characteristics discussions were intended to establish broad scale strategic assessments of existing forest conditions. Use and resource discussions were intended to develop participant assessments of types of use and resource conditions. Desired futures and issues for Plan revision identify topics participants wish to see addressed by future decision making or planning. For each of these topic areas, the strategy was to avoid direct questions in favor of open-ended questions that allow participants to structure responses from their perspective (Foddy 1993).

An open-ended discussion approach is consistent with qualitative interview techniques that begin with the most general types of issues and then focus group dialogue to develop the specifics from the participant's perspective (Spradley 1979; Agar and Hobbs 1985). This approach also benefits from having a base of information to draw on about existing issues, beliefs, values, and attitudes collected for other national forests. This existing information can be used to structure follow-up questions and probes. The discussion groups conducted for this work relied on information from similar work conducted for other national forests in Region 3, including the Apache-Sitgreaves, Coconino, Coronado, Prescott, Tonto, Gila, Carson, and Cibola National Forests as well as three national grasslands (e.g., Russell and Adams-Russell 2005; Russell and Adams-Russell 2006).

Discussion groups were held in Espanola, Cuba, Las Vegas, and Jemez. Ten persons were invited to the Espanola meeting, eight persons for the Cuba location, fifteen persons for the Las Vegas meeting, and seven persons for the Jemez meeting location. Some individuals invited friends to attend the meetings with them. Others who were invited but unable to attend asked others with similar viewpoints to attend in their place. Some participants were accompanied by their spouse or other relatives. Approximately, forty persons comprised the total for the discussion groups for the Santa Fe National Forest. These individuals represented local and state government, grazing associations, environmental groups, ranching interests, recreation users, off-highway vehicle users, utility and mining interests, outfitters and guides, economic and community development interests, and conservation groups. Additionally, six individual interviews were conducted with persons who were identified as having environmental, wood products, recreation, local business, and community interests.

## Data Processing and Analysis

All of the discussion sessions and some of the individual interviews were recorded. Sketch notes were taken for the recorded sessions and interview field notes for non-recorded sessions (Sanjek 1990; Emerson, Fretz, and Shaw 1995). The recordings were not transcribed because of budget constraints. However, the sketch notes were annotated with the time mark in the recordings by topic area. This allowed for relatively efficient access to key topics that were identified during the discussion session. This material was then coded by topic area using a combination of predefined and emergent codes (Strauss 1987; Strauss and Corbin 1998). The predefined codes correspond with the discussion guide categories and the emergent codes were developed from participant statements that did not correspond with the predefined categories. Major categories for presentation were then constructed and issues were grouped within these categories. Representative comments were then identified to illustrate specific points where the issue could benefit from a statement by participants in their own words.

Analysis and discussion of this material presents several challenges. Time, budget, and page limitations require a strategy to present consumable and useable information that also expresses the participant's perspectives on the issues discussed. The strategy used here identifies key issues by topic category to illustrate the range of issues of concern to project participants. The authors recognize this strategy abbreviates and under-develops complex issues. However, future collaborative efforts should offer the opportunity to develop these topics in the detail that is useful for stakeholders, the Forest Service, and others participating in the planning process.

# Context: The Forest and Socioeconomic Setting

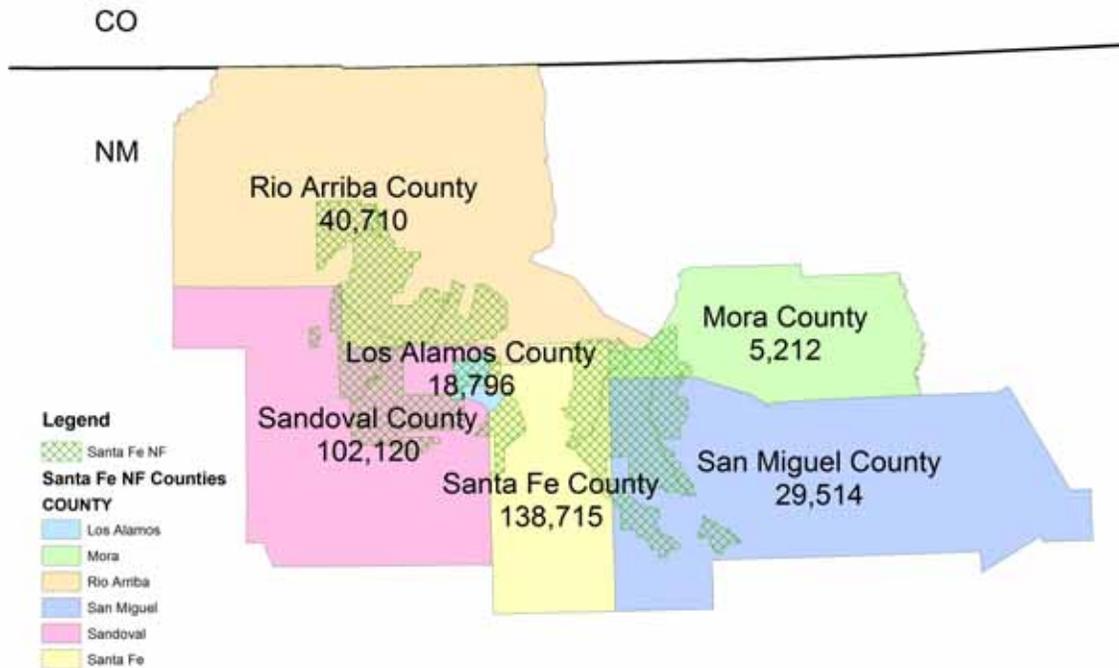
Among the eleven national forests in the Southwestern Region, the Santa Fe National Forest ranks seventh in gross acres; and it is third in gross acres among the five national forests of New Mexico. Among the approximately 1.6 million acres of national forest lands, there are about 300,000 acres of designated wilderness including the Pecos, San Pedro Parks, Dome, and the Chama River Canyon. Additionally, the Vales Caldera National Preserve is located within the boundaries of the SFNF near the community of Jemez Springs that is south of the preserve and Los Alamos to the east. SFNF elevations range from about 6,000 feet to just over 13,000 feet on Truchas Peak in the Pecos Wilderness. There are two Scenic and Historic Byways (Jemez and Santa Fe) and two designated Wild and Scenic Rivers (Pecos and Jemez) within the SFNF. These resources are administered by five Ranger Districts associated with nearby communities of the same name: Coyote, Cuba, Espanola, Jemez, and Pecos/Las Vegas. The Forest Supervisor's office is located in Santa Fe.

**Table 1: Region 3 Forests Ranked by Total Area**

Southwestern Region (3)	Rank by Size	Gross Acreage	NFS Acreage	Other Acreage
Tonto NF	1	2,969,543	2,872,935	96,608
Gila NF	2	2,797,628	2,708,836	88,792
Apache-Sitgreaves NF	3	2,761,386	2,632,018	129,368
Cibola NF	4	2,103,528	1,631,266	472,262
Coconino NF	5	2,013,960	1,855,679	158,281
Coronado NF	6	1,859,807	1,786,587	73,220
<b>Santa Fe NF</b>	<b>7</b>	<b>1,734,800</b>	<b>1,572,301</b>	<b>162,499</b>
Kaibab NF	8	1,600,061	1,559,200	40,861
Carson NF	9	1,490,468	1,391,674	98,794
Prescott NF	10	1,407,611	1,239,246	168,365
Lincoln NF	11	1,271,064	1,103,748	167,316
National Forests (11)		22,009,856	20,353,490	1,656,366

Source: U.S. Forest Service [http://www.fs.fed.us/land/staff/lar/LAR04/table3\\_r3.htm](http://www.fs.fed.us/land/staff/lar/LAR04/table3_r3.htm)

Figure 1 shows the relationship of the Santa Fe National Forest with nearby counties. Five counties contain the majority of the lands and resources of the SFNF: Mora, Los Alamos, Sandoval, Santa Fe, and San Miguel. About 7,300 acres of SFNF managed lands are also contained within Taos County. Among the five counties with the majority of SFNF managed lands, Rio Arriba County has the largest acreage of SFNF managed lands (555,054) and Los Alamos has the smallest acreage (42,046). However, SFNF managed lands account for about sixty percent of all lands in Los Alamos County, 21.09 percent in Santa Fe, 15.15 percent in Sandoval, 14.71 percent in Rio Arriba, 12.52 percent in San Miguel, and about 8 percent in Mora (Bureau of Business and Economic Research 2006:14).



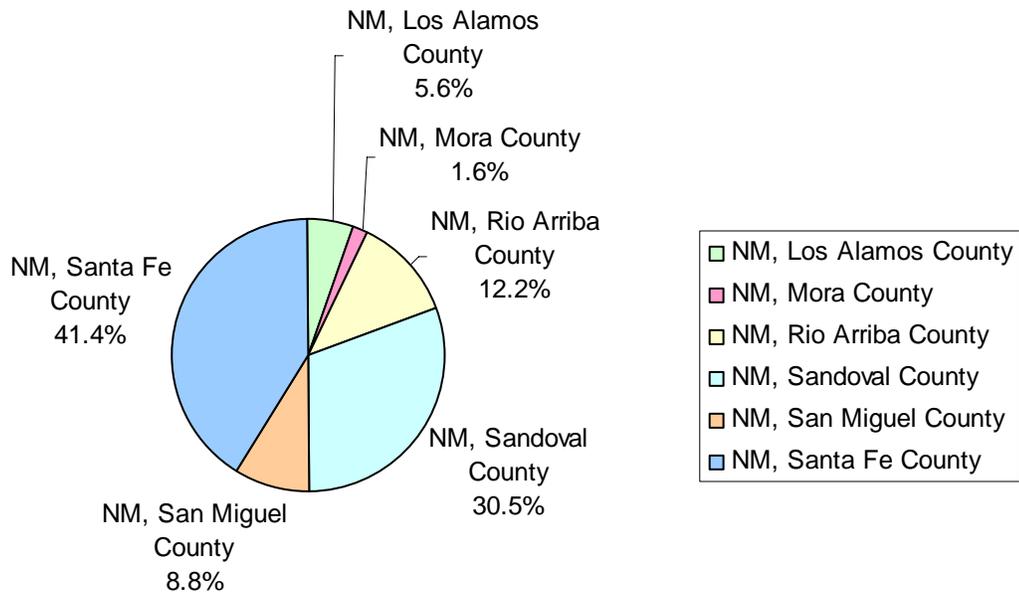
**Figure 1: Santa Fe National Forest Counties**

**Table 2** on the following page is a summary of selected demographic characteristics for the five major associated counties. Figure 2 is a pie chart displaying the percentage of total population by county for the five major counties associated with the SFNF. The demographic summary is intended to provide context for the discussion of values, attitudes, and beliefs presented in the results section of this report. This context is useful for understanding the types of economic, demographic, and other sociocultural issues that may influence the relationships of stakeholders, communities, and tribes with national forest lands. The University of New Mexico socioeconomic assessment should be consulted for a comprehensive discussion of the social and economic context of the Santa Fe National Forest (Bureau of Business and Economic Research 2006).

**Table 2: Santa Fe National Forest**

People QuickFacts	Santa Fe NF						
	New Mexico	Los Alamos County, NM	Mora County, NM	Rio Arriba County, NM	Sandoval County, NM	San Miguel County, NM	Santa Fe County, NM
Population, 2003 estimate	1,874,614	18,802	5,216	40,731	98,786	29,670	136,423
Population, percent change, April 1, 2000 to July 1, 2003	3.1%	2.5%	0.7%	-1.1%	9.9%	-1.5%	5.5%
Population, 2000	1,819,046	18,343	5,180	41,190	89,908	30,126	129,292
Population, percent change, 1990 to 2000	20.1%	1.3%	21.5%	19.9%	42.0%	17.0%	30.7%
Persons under 18 years old, percent, 2000	28.0%	25.8%	26.7%	28.6%	29.6%	27.4%	24.1%
Persons 65 years old and over, percent, 2000	11.7%	12.1%	15.4%	10.9%	10.6%	11.7%	10.8%
Median Age	34.6	40.8	39.6	34.5	35.1	35.1	37.9
White persons, percent, 2000	66.8%	90.3%	58.9%	56.6%	65.1%	56.2%	73.5%
Black or African American persons, percent, 2000 (a)	1.9%	0.4%	0.1%	0.3%	1.7%	0.8%	0.6%
American Indian and Alaska Native persons, percent, 2000 (a)	9.5%	0.6%	1.1%	13.9%	16.3%	1.8%	3.1%
White persons, not of Hispanic/Latino origin, percent, 2000	44.7%	82.1%	16.9%	13.6%	50.3%	18.9%	45.5%
Persons of Hispanic or Latino origin, percent, 2000 (b)	42.1%	11.7%	81.6%	72.9%	29.4%	78.0%	49.0%
Language other than English spoken at home, pct age 5+, 2000	36.5%	11.5%	68.6%	65.9%	31.8%	60.8%	36.9%
Median household income, 1999	\$34,133	\$78,993	\$24,518	\$29,429	\$44,949	\$26,524	\$42,207
Per capita money income, 1999	\$17,261	\$34,646	\$12,340	\$14,263	\$19,174	\$13,268	\$23,594
Persons below poverty, percent, 1999	18.4%	2.9%	25.4%	20.3%	12.1%	24.4%	12.0%
Persons per square mile, 2000	15	167.8	2.7	7	24.2	6.4	67.7
<b>Agriculture</b>							
Number of Farms 1997 to 2002 % Change	-15.1%	-33.3%	-7.7%	-13.0%	-25.4%	-27.8%	-10.7%
Land in farms (acres, 1997 to 2002) % Change	-3.0%	(D)	-4.1%	-1.0%	-5.8%	-18.2%	3.1%
Average size of farm (acres, 1997 to 2002) % Change	14.4%	(D)	3.8%	13.9%	26.2%	13.3%	15.5%

Source: U.S. Census Bureau 2002 People Quickfacts and U.S.D.A. 2002 Census of Agriculture



**Figure 2: Percentage of Project Area Population by County**



# Results

The discussion groups and individual interviews resulted in a rich set of information about public assessments of the Santa Fe National Forest. The results presented in this report are not a full record of this information. Constructing and interpreting such a record may be useful for a broader understanding of the social and cultural environment affecting forest management, but it is beyond the scope of this work. Instead, this report focuses on public perspectives about issues and needs for change associated with forest management and revision of the existing Forest Plan. This discussion is intended to assist publics and SFNF managers to collaborate in the Plan revision process by identifying topics of concern to publics and then focusing on the issues that can be addressed in the Plan revision process. Issues that are beyond the Plan revision decision space may be relevant to other forest management decision making. Similarly, other issues may require problem-solving approaches in venues outside the Forest Service. This work can thus be used to assist in understanding the fit between public concerns and the Plan decision making space. The authors also hope publics and planners will discover other uses and applications for this information through a dialogue about the findings, their meaning, and their implications for improving the resources and conditions on the Santa Fe National Forest.

The results discussed here are in categories corresponding with the coding and analysis of the discussion group and interview data: the planning environment; multiple-use issues; resource concerns; and, desired futures for the SFNF. The planning environment category discusses issues that are likely to influence how publics and the Forest Service interact in the collaboration process and particularly the identification of needs for change, desired futures, and other concerns about forest management. This information also describes assessments of forest characteristics and conditions that describe public attachments to the SFNF as well as problems to solve and issues to address in future management decision making. Resource and multiple-use values, attitudes, and beliefs also identify topic areas regarding needs for change or resources that have emerged as important in the years since the last Forest Plan. The desired condition category presents public assessments of future conditions concerning stakeholder and community relationships with the lands and resources of the Santa Fe National Forest. Information in these categories is presented as topic themes that organize a collection of participant statements within a coding category.

## Planning Environment

Forest planning and management occurs in the context of social, economic, political, cultural, and ecological conditions and trends. The configuration of these factors can influence what topics are identified as requiring management attention, desired solutions to identified issues or problems, and how publics choose to participate or not in planning and collaboration activities. These configurations may have variability within social environment adjacent to the SFNF. This variability can contribute to differences among stakeholder groups or among communities, depending on socioeconomic conditions and cultural orientations. Identifying the configuration of socioeconomic and cultural issues particular to the SFNF can assist planning and management staff to assess likely areas of public concern in future discussions about Plan revision issues.

For the purposes of this work, the following categories of information express values, attitudes, and beliefs relevant for the planning environment:

- The social setting identifies participant assessments of the social environment and noteworthy interactions between communities and forest resources and uses.

## Results

- Forest conditions and characteristics describe public assessments of conditions and trends that influence the identification of issues for Plan revision.
- Management approaches addresses public assessments of SFNF capacity to achieve sustainability and desired future conditions.
- Agency-wide policies and procedures describe aspects of Forest Service culture and policy that are perceived by publics to affect agency capacity to complete its mission.

## Social Setting

Five interconnected themes were identified about the social setting of the Santa Fe National Forest: (1) population growth and its interactions with forest uses and conditions; (2) the importance of community-forest connections for quality of life; (3) social and cultural diversity and its influence on the meanings of forest resources; (4) changes in stewardship values and beliefs; and, (5) ongoing changes in the socioeconomic relationship of communities with national forests.

## Population Growth

Assessments of local population growth vary by location of the discussion group, but there is a shared assessment that northern New Mexico is experiencing population growth that is placing new demands on forest resources. One new demand is the obvious increase in use related to increased population. Another demand is the percentage of “problem users” as a percentage of total population: participants perceive an increase in the absolute number of problem users as overall population increases. Population growth is also perceived to result in new demands for development adjacent to national forest lands and within the wildland-urban interface (WUI). The potential threat to life and property of residences in the WUI is perceived to be related to population growth and to the needs for education about fire protection for new residents.

## Community-Forest Connections

An explicit theme concerns the connection between community quality of life and the presence of the SFNF. Participants expressed beliefs that access to public lands enhances the quality of life for residents of adjacent communities. For example,

*There is a huge relationship between communities and this forest. Part of why people come to New Mexico as tourists is for the natural beauty and the natural resources. When they quit coming or when you lock up the forest and close it down, the impacts are significant. When they closed the Sandia, I am sure it had a big impact on the backside of the mountain. ... There are places where they need to close it, especially where there is a fire danger. For example, when they closed the road up to the ski area I understood why they did it. But, there are hardships on the community because of that. So, when they think about management actions, they also need to think about the effects on communities. I live in this state because we have so much public land access. If you start locking big parts of it permanently, then New Mexico loses part of its appeal.*

A sub-theme about this quality of life connection is the threat from ongoing subdivision development. Participants note that subdivisions built in areas adjacent to the SFNF are

increasing the demands on forest resources, especially needs for water than is presently in short supply. As one participant observed,

*The forest is a great benefit to our communities and our way of life, but we are in danger of loving it to death. We need to find a new balance for the future and balance our need for subdivisions with the needs for keeping the quality of experience that draws people to live here in the first place.*

### **Social and Cultural Diversity**

Participants describe the social setting of this region as having noteworthy social and cultural diversity. Cultural diversity is expressed in the presence of Hispanic and Native American cultural groups with a historical presence in this region and the traditional uses of forest resources by these groups. Social diversity is expressed in the presence of urban and rural communities and the mixture of recent migrants with long-term residents. For example,

*Most of the communities around here (Jemez) are growing. We are having a lot of people move in. But, the presence of the Laboratory, Los Alamos, employs maybe five percent of people in the whole state. So, you have people from all over who live alongside the people who have lived here all their lives.*

The social differences among longer-term and newer residents are noted as an important social characteristic with implications for community-forest connections:

*People who move here are looking to move to the woods to be alone in the woods. But, when you move to the country, you often need your neighbors more because if you get stuck in a ditch, then you need your neighbor's help. So, they (new residents) move here to get away and they start off on the wrong foot. They want to be by themselves so they buy land right next to the forest and they sometimes don't know that it isn't a guarantee they will be by themselves!*

*Many of the new people that come in want to change everything. They want to tell us how they did it back east. We have a lot of traditions in our community and the people moving here do not appreciate that when they are asking for a change. It is a mix of pluses and minuses for our communities. The newer people want paved roads and they don't want cows on their lawns and they don't always understand rural ways of life.*

### **Stewardship Beliefs and Values**

A corollary to social and cultural diversity is the identification of differences in values and beliefs about natural resource stewardship and "land ethics." In some instances, participants make a direct connection between differences in stewardship and land ethics among "newcomers" and longer-term residents. For example,

*Some of the newer people move here and all they know about the forest is what they have seen in Walk Disney movies about Bambi. They don't have any direct connection to the forest and they don't care for it in the same way that the logger or rancher does who has lived off the land. We see these big misunderstandings about what the forest is and how it should be cared for.*

## Results

In other instances, differences in stewardship values are attributed to more generalized changes in awareness about natural resources in contemporary society:

*People are spending less time in the forest and understand what is going on there less. The effect is they respect the land less and there are problems that result from use when people do not respect the land.*

Participants also suggest that different perceptions about natural resources and particularly national forests contribute to differences in stewardship values and land ethics:

*People in this part of New Mexico are not uniform in what they think a forest is and what they think nature is. I have encouraged Forest Service people to ask the public what they think a forest is because there are a variety of answers I observe about that question. Some people think a forest is a park and that you can do whatever you want in a park because someone else will pick up after you.*

### **Socioeconomic Changes**

Participants describe beliefs about changes in the socioeconomic relationship of communities and forest resources. These beliefs exist in the context of other beliefs about the transition from a primarily rural to a more urbanized setting for the Santa Fe National Forest. For example

*Santa Fe has changed from a town of maybe twenty thousand in the early sixties and we actually used to shop on the Plaza!*

Participants note changes in infrastructure such as roads as facilitating the growth of rural areas and the development of subdivisions that are perceived to be proliferating on the edges of public lands:

*It used to be that it was mostly ranches that were next to the forest. Now, instead of cows, there are ATVs and houses and it is growing all the time. We used to be small communities, but that has all changed since the last Forest Plan.*

Participants in rural communities such as Cuba, Jemez, and Las Vegas also describe a decline in natural resource industries that once were the foundations of rural economies in this region:

*This used to be a thriving community based on timber and grazing. But the Forest Service buckled under the pressure of the environmentalists, and our community changed. It used to be that 90 percent of our economy came off the forest and now it is maybe 10 percent. But, we still have a strong sense of history and attachment to the land here.*

*Cuba used to be a logging community. Logging provided a stable living for people here. People who lived here loved the logging. But, we fought them (special interest groups) about ten years and then we lost. About twenty years ago the mill closed down and our town began to change.*

Participants describe the interconnections of natural resource industries and other socioeconomic characteristics of their communities:

*We used to depend on the forest for our economy. Maybe ninety percent of our livelihood used to come off the forest and now it is less than ten percent. There are not even that many cattle*

*anymore. So, there have been dramatic changes in the community and the way of life of depending on the forest. A mill just does not employ the people who work there. There is a spin-off that affects the loggers, the people who bring the logs in from the mill, and in the community. The money that comes from those mills also contributes to the county finances and it also contributes to restoring the forest. Now, that does not happen. We have become like a third world country because we don't have the income we used to have.*

*When the mill was here, we had four grocery stores, motels, and cafes. Now, we have one grocery store. That is an example of how things have changed.*

Participants from the rural communities around the SFNF also emphasize the transition to recreation as a primary socioeconomic connection to forest resources:

*The primary use of the forest used to be timber and grazing, but there is not much timber and there are only a few grazing permittees. We have become a heavy recreation area so the relationship of the community to the forest has changed.*

### **Forest Conditions and Characteristics**

The aesthetic and quality of life benefits of the forest, the effects of drought on forest management, forest health, and the relationship of the forest to its neighbors and adjacent communities are the prominent themes about forest conditions and characteristics. The SFNF is described as an important asset for adjacent communities that offers aesthetic and quality of life benefits that are inspiring and enhance community quality of life. For example,

*The reason I moved here is the national forest. It has some of the best trail riding of any place I have been. There are wonderful arroyos and wide-open spaces and great views that make you realize why this is called the land of enchantment. It is like living on a beach without an ocean. The true treasure of this forest is the landscape and what it offers.*

Another participant commented:

*It is truly a remarkable landscape with extraordinary variety in the vegetation and landscape. The variety of the forest sets it apart from what is around us otherwise and the contrast is what I find so aesthetically pleasing.*

Participants describe the ongoing drought in the Southwest as a powerful environmental influence on existing forest conditions. Similarly, forest health, and particularly the association of tree density and insect infestations (e.g., bark beetles) is a prominent theme about existing forest conditions. In general, participants assess the forest as unhealthy because of the perceived prevalence of high tree density and the damage to trees from bark beetle and tent caterpillars. Poor forest health is perceived as problematic for wildlife and as a fire danger that can threaten nearby landowners and communities:

*The forest out there is overgrown. It is not a very healthy forest. It is not good habitat for animals and especially elk and deer, but it really needs some thinning and active management. If the forest was healthier overall, we can also prohibit catastrophic fires, which this forest is prone to right now.*

## Results

Addressing the connection of tree density and insect infestations is perceived to influence overall forest health. For example,

*Bark beetles and tent caterpillars are really a problem. If you get the forest to proper health, then there will be fewer problems with those pests.*

The third prominent theme about forest conditions and characteristics concerns the connections of the Santa Fe National Forest with its neighbors. Participants describe the SFNF as a forest with diverse neighbors:

*This is a forest with a lot of neighbors. Around here we have the Valles Caldera, Bandolier National Monument, Los Alamos, homeowners, and ranches are other neighbors of the forest. If you just look at this area we have all these people who are trying to live together. The rub comes in where you have people stepping on each other's toes. So, they have to be aware of how to be good neighbors and consider the effect of how they manage on the forest's neighbors.*

There is also the assessment that the forest can be both an asset and a potential liability if management issues of concern to neighbors are not addressed:

*They talk about the forest as being a selling point for the people buying these homes next to the national forest. But, they don't think about the fire, the cows, the ATVs and the other problems that can come off the forest. That is where they need to think about neighbors.*

Participants value the SFNF as a “forest” and not a “park.” Parks are perceived to offer less freedom of use than forests:

*National forests are different than national parks. The Park Service is going the direction that in the future the only way you are going to see what is in a park is if you go on the Park Service bus and they tell you what you are seeing as you drive by. You can't touch dirt. We don't want this forest to become like that. We want the forest to be a place where people touch and see and use the forest. Humans are a part of nature and the forest is the place where we learn about that. If people don't understand what we have out there by using it, then they are going to lose interest in supporting it.*

*People hate the Park Service because they have all of these 'do not' signs all over the place. People like the forest because they can go out there and have the freedom to do what they want to do. On the other hand, you have all this population pressure coming in from the Espanola Valley and Albuquerque. They are coming in to a relatively small area and this area cannot handle it. This area is now starting to look more and more like a park, especially if you charge fees. People want it to be more like a forest and not a park.*

Implicit in participant distinctions of parks and forests is the assumption of responsible use of forest resources and lands. These assumptions are expressed in the following comments suggestions concern about the use of the SFNF as a “day park:”

*With more population and fewer places to go, we are getting more and more people coming from Albuquerque who are using the forest as a day park. They don't have the connections to the forest and they don't have the values about stewardship that people who use the forest should have.*

*It has become more like a day use park for Albuquerque with a guest population that does not have an attachment to the resource except for when they are here. That lack of attachments leads to a disconnection of the resource with the users.*

## **Santa Fe National Forest Management**

In other reports completed for other Region 3 national forests, participants express beliefs and expectations about management actions and issues (e.g., Russell and Adams-Russell 2005). Data from the discussion groups for the Santa Fe National Forest contain similar themes about management issues specific to the SFNF and others that appear to be agency-wide. The SFNF-specific topics include concerns about archaeological bottlenecks, “thick bureaucracy,” communication, and community awareness. These mostly critical comments coexist with other sentiments about positive working relationships with a wide range of SFNF staff. For example,

*The staff people I have worked with on the forest for the past twenty-five years have mostly been good people. Their hearts and their intentions are in the right place.*

*I have worked with them for thirty-five years and my experience is they are very professional. I think they do a great job. They care about the land. They are trying hard to keep the weekenders from throwing garbage all over the place.*

Each of the specific management concerns identified in the discussion groups data are briefly summarized below.

### **Archaeological Bottlenecks**

In each discussion group and in several individual interviews, participants commented about perceived “archaeological bottlenecks” that are believed to inhibit implementing forest management. A component of this theme is the notion that archaeology has more influence than other resource specialists. For example,

*Everybody in the Districts defers to the Archaeologist. They are the most powerful persons in the forest. They are there to represent a certain interest and not build a wall that no one can get through. The District Rangers need to tell them that they appreciate their concerns, but if there is a need for a bulldozer to build a fire line, then they need to do that for public safety. But, the archaeologist is driving natural resource management on this forest and it makes things not happen. They have a role to play, but it is out of proportion on this forest.*

*If you move a shovel full of dirt on this forest without an archaeological survey, then you are done if you did not do that first. The archaeologists are running the show and not the Rangers. They are imposing their view of how things should be and there is no balance with other considerations.*

The strongest component of this theme is expressed in the following comments about a perceived backlog in archaeological work that is inhibiting implementing projects of concern to participants:

*What is happening is that the archaeologists are so back-logged that they cannot get the work done. So, things are not happening because of these roadblocks. It is almost as bad as the*

## Results

*Endangered Species Act. Sometimes they are stopping projects because of an old tin can. Where is the common sense in that? It is affecting us all over this forest.*

*They should recognize that archaeology is a bottleneck in their policy and it gets in the way of things getting done.*

### **Bureaucracy**

Participants acknowledge that bureaucracy is an inevitable component of the Forest Service. However, a theme in the data indicates a belief that the SFNF operates a “thick bureaucracy” that is not friendly for interested publics and it is perceived as another factor limiting SFNF management:

*It is a thick bureaucracy and it is hard to get things done. ... The folks here are caught up in their bureaucracy and they have lost sight of how to get things done. It seems like they are an enemy of the public because local people see dangerous things and bring them to their attention and they ignore us or dismiss us. The bureaucracy has become so dense that it is a real problem.*

*Just before the fire I had to beat my way through the bureaucracy in the main Santa Fe National Forest office to get to the person who makes the rules about actually closing the forest. I had to beg them to close the forest before it burned. I told them there was going to be a fire because no one is out there enforcing the regulations that can prevent a fire.*

### **Communication**

Participants in each of the discussion groups expressed a belief about a need for improved communication between SFNF managers and interested publics.

*We were trying to help them out and we made a call about this problem and we were basically yelled at for asking them if we could help. No one there seems to have connection to the past agreements that were made and there is no continuity in communication.*

### **Community Awareness and Consideration**

Participants expressed a belief in the need for community awareness among SFNF managers. These beliefs contain a component about communication, but the essence of this sentiment is expressed in the following comment:

*They need to have a little more consideration for the connections people have with the resource. There was a road that led into a campground and it became impassable. Well, they did not say anything about it to the people who depend on the campers for business. Then a week before Memorial Day I heard they were not going to open it. We had to go through the whole bureaucracy to figure out how to get that road open. ... It took a whole lot of effort and I don't see them reaching into the community to think about the effects of what they do on those of us who live here.*

The beliefs about road-blocks, bureaucracy, community, and community awareness suggest areas to explore in future collaboration and public participation activities. These beliefs indicate an

opportunity to explore issues and concerns that can improve the relationship between the SFNF and interested publics.

## Agency Policies and Procedures

Participants expressed beliefs and expectations about Forest Service policies, procedures, and agency culture. These beliefs have implications for public trust in agency ability to manage federal resources and the ability to develop plans and work effectively with interested publics.

### A Broken Bureaucracy?

Participant dialogue in discussion groups included a diverse set of comments that appear to be organized by an implicit theme that asks the question: is the Forest Service bureaucracy broken? This dialogue describes personnel that are usually assessed as competent professionals who either do not make decisions or they make decisions that appear at odds with “common sense.” For example,

*The people in the Forest Service know what to do and they know how to do it. They are excellent, qualified people and their hearts are in the right place. But, their system is holding them back and they cannot get anything done.*

*I keep going back to asking myself why they are making these bad decisions, why are these good people with good intentions doing bad things and making bad decisions. What is the answer to that? Some of that has nothing to do with money. Some of it is they are losing the expertise to know what is going on. Then there is a lot of pressure to get decisions out without enough data. So, they are making analysis-free decision making. Some of that is coming from Congress, some of it from the Administration. So, the process is a problem. And, there is the constant changeover of personnel. You start a project with one group of people, they move on and another person comes in and they start out new and maybe they miss a lot.*

*I think there are a lot of good people in the agency. They do not want to do things that are bad for the resource. There are a lot of them that are trying to do the right thing. There is a larger problem and that is the agricultural model of forestry. It is the idea that forests are like cornfields and you grow timber and produce 2x4s. Even though there have been changes over the years, there is still this agricultural bias in how forests work and that creates problems.*

Another component of this theme is the notion that forest managers have become so risk averse that decision making is inhibited. For example,

*It seems they would rather do nothing than make a mistake. So, nothing gets done and that is a problem for the resource and the people who love the forest.*

Similarly, another indicator of a problematic system within the Forest System is the interpretation of how to apply the National Environmental Policy Act (NEPA). For example,

*They have a crazy system. They have money in their budgets and the region will try to give it to the individual forests to get things done, but because of NEPA or other roadblocks, they will pull that money and ask the state if they can get the money on the ground. Their whole problem is how they interpret and how they use NEPA. The Forest Service interprets it more*

## Results

*strictly than say BLM. ... Now, I know they get sued a lot, but they are strict in how they interpret it and it slows them down.*

### **Budget Limitations and Allocations**

Participants expressed a general belief that agency budgets are limited and this influences the types of management actions and services that can be provided. However, there is also a coexisting belief that budgets are limited but adequate, but there is a need to examine how monies are allocated. For example,

*There are a lot of good people in the Forest Service trying to do a good job. They are usually field level people who are close to the resource and who know the problems well. In many cases they also know the solutions. But, my experience with the Santa Fe watershed group is that they have enough money to do the job. They have the money to monitor for wildlife ....But, if you look carefully at the data they have gathered, they still do not know the population trends for the indicator species. The project is almost completed, but we still don't know the effects of thinning on for example, songbird populations, or other wildlife. So, that leads me to believe that it is not just money. It is how they allocate it and the models they use to think about how to manage the resource.*

### **Data and Local Knowledge**

Data and local knowledge express different themes about using information in decision making. A consistent theme in other reports prepared for this project is the belief that the Forest Service undervalues local knowledge as useful for decision making and understanding forest resources:

*Local knowledge and experience is not tapped. It is ignored. We know the forest because we use it and keep up with what is going on. We are perceived as the enemy and not an asset. We want them to realize local knowledge has value that can be used to manage the forest.*

Another frequently expressed belief is the notion that the Forest Service is not effectively using scientific data for management and decision making. For example,

*In the past, forest management was oriented to timber. Now, forest conditions have changed and we have an overgrown forest that is unhealthy. Wildlife habitat is threatened and the danger of a catastrophic wildfire is increasing. They need local leadership that can get things done. ... They have had enough money and they have had good scientists doing the work. There are deeper problems in the agency that will not be solved by money. ... I can guess that there is an aversion to on-the-ground information. I think they find that threatening.*

Each of these themes expresses a desire for revisiting the basis for decision making and especially providing for more diversity in the information used for forest management.

### **Disconnects**

The “disconnect” theme identifies sentiments regarding the basis for understanding forest resources and making informed decisions. The disconnect theme is thus closely related to the “data and local knowledge” theme discussion above, but it focuses on the connection between knowledge, experience, and informed decision making. For example,

*There is a problem with how decisions get made. Let me give you an example. Not long ago they lowered the fire restrictions on the District and I called the District office and asked them why they changed the fire conditions sign to moderate when it is so dry that everyone knows that the fire danger was higher than 'moderate.' So, the person at the District said, 'we don't make that decision, that comes from Santa Fe.' So, there is a disconnect between what is happening locally and what the decision makers are doing.*

A similar sentiment is expressed in the following comment:

*In the past there was an emphasis of knowing what was happening on the ground. Now, the agency is being pressured to crank out decisions. Those who are successful in getting decisions out early rise to the top. The field biologists or others who work with the resources have to go through data gathering and trends and it is a slower process. So, they don't rise to the top. So, there is an agency that is disconnected from the land and the public they are supposed to serve.*

The “disconnect” between local expertise and knowledge and informed decision making is also illustrated in the following comment:

*I think it is a bigger issue than any localized management. It is about what comes out of Washington and how that affects local decision makers. Sometimes I wonder if folks making the final decision even know where the place is on the map. They are having a great influence on a landscape or community and they don't know much about it. There is a disconnect there. There are some great people still interested and trying to take care of the land and trying to educate people about better use ....*

## **Expertise and Experience**

Related to the notion of a “disconnect” is a belief in the loss of expertise and experience within the Forest Service. The effect of this perceived loss is to undermine public confidence in the capacity of the agency to complete its mission:

*We have employees in the Forest Service that we call concrete cowboys. They came through the education system and they spent their summers on the forest or the BLM or wherever. Then, they are the individuals we are dealing with who are the middle managers. Their concepts and ideas came out of the education-based system. It was not the grass-roots person who grew up on the ground.*

*The kind of people they have managing the forest has changed. They don't know how to get on a horse; and, they don't know if their saddle is loose or even how to saddle a horse. They came from a selection of people who scored the highest in their educational background, but they know nothing about our resources. When you put them on the ground, they are just as lost as I would be in the middle of New York City. They don't know where to go, how to get there, who to call for help, and the management has to have a certain amount of local people who know their resources.*

According to participants, one of the first Rangers on the Santa Fe National Forest was a J.W. Johnson. Mr. Johnson could very well represent any of a number of Rangers from prior generations who are believed to have spent more time with interested publics and knew more about managing forest resources because they have direct contact with the resource:

## Results

*J.W. Johnson showed up in 1915 and left about 1945. That is thirty years as a Ranger. He was a guy who would sit, spit, and whittle with you and the Forest Service does not do that any more. Only two times in the last twenty-five years have I seen a Forest Service person in the woods. So, how do you manage my operation in the woods if you don't know the details of what I am doing?*

*It is not necessarily more budget that is going to make things better. It is the day-to-day culture of things like returning phone calls and knowing what is going on out on the forest. They used to have personal relationships with people using the forest. They had a real resource in people who knew the District and knew the forest, but they don't have that knowledge to get things done. You can't partner if you don't understand the resource and you can't get things done if you don't.*

The perceived loss of expertise is believed to be directly related to Rangers and other forest managers who are perceived to be in their offices and not “on the ground.” For example,

*Nobody is handling the store. There has been too much emphasis on the computer and staying in the office. It used to be you would see them out in the field all the time and now you never see them and they are in front of the computer. They have their hands full. They have gone from a land management agency to a fire-fighting agency. I think they are scared to do anything and that is why they are not doing what they need to do. They need to get back out in the woods and rediscover what the resource is about.*

These perceptions appear to result in beliefs about the capacity of the Forest Service to manage resources of concern to interested publics:

*They don't have the people on the ground in the woods to know what is going on. They can't understand common sense solutions to problems out there and what we end up with is decisions that do not make sense. They need to have more people who understand what is happening in the woods.*

### **Process-Focused Agency**

A frequently expressed perception is the Forest Service is focused on process issues and not resource management. This belief organizes comments such as the following:

*The biggest problem is that if you want to do anything on public lands, then it takes three to four years to get it through the process. By then the personnel have changed and you have to start all over.*

*We were involved with them after the Pecos fire. They were so caught up in all the bureaucratic requirements that they were asking us to do things (to restore the landscape) that they did not make any sense. If you are on the ground and you see the streams are a problem, the habitat is ruined, and the bridges are out, and there are all these problems that have to do with the forest, then you wonder why they are caught-up in the bureaucratic reports and not restoring the landscape. I think of myself as an environmentalist and I found myself very frustrated with the bureaucracy because it did not make any sense. Then they proposed a campground to bring more people in up farther in the canyon. But, there were problems with that and it was as if they were not attending to the need to restore the environment, but they were bringing in more people to the campground that could cause more*

*problems. They seem out of touch and too focused on the bureaucratic process and not what is happening on the ground. It is a problem with how the agency functions.*

*They have become focused on the checklist. For example, it took us six months to get approval for private loggers on a public road that was dedicated to that for seventy years. They had all these requirements that had to get met and it took six months to get those approvals for things that were just inconsequential. They are just thinking about the checklist, that has become the important thing. ... I know they will say that the law requires that, but there are conditions where it just does not make any sense. They need a common sense clause in the environmental standards. The process has become void of common sense.*

A related set of comments expresses the notion that the Forest Service needs to improve the performance in process issues rather than limiting attention to process:

*There are some process issues they need to improve. Public lands are a national asset with local importance. I don't think the issue is doing process less, but doing process better. Some people are frustrated with how slow things are, but we live in complex society with competing interests and it is important to do the process well and I don't think they are doing it as well as they should.*

### **Staff Rotation**

If any one theme about agency policies and procedures could be said to be pervasive, it is public concern about the rotation of Forest Service leadership staff, especially Rangers and Forest Supervisors. Participants are especially concerned about the effects of rotation and the perceived unwillingness of the Forest Service to acknowledge those consequences. The content of these sentiments is expressed in the following statements:

*I know that you have to move around to get promoted. You have people who are experts in their certain area. Then they transfer them a totally new area and the poor guys don't really know what they are supposed to do. By the time they get to know a place they are transferred again. My experience ... is that the Rangers are essentially dependent on people who have not moved around. They are the ones who do the work for management, but they are the ones who have been there a long time and who know local conditions.*

*We understand that in order for them to get ahead, you have to move to a new position up the line. But, what they don't consider is the local impact of that movement. They don't acknowledge that effect and factor that into their management approaches. What is going to happen when the District Ranger or the Forest Supervisor is going to be replaced? It is not part of their thinking to ask what about the local effects of those changes. And, they don't seem interested in harvesting the institutional knowledge those folks have before they move on.*

The continuity of local knowledge among Rangers and Forest Supervisors as well as an appreciation for the effects disrupting agency-community working relationships are both topics of importance for publics that are perceived to be unacknowledged by the agency.

## Sidebar Issues

Participants identified issues that some acknowledge being outside the decision authority of the Forest Service. Nonetheless, these issues are described as affecting forest management and they are likely to influence public assessments of the problems to solve in future collaboration and public participation activities. The specific sidebar issues include: the Endangered Species Act and its interaction with management of the Santa Fe National Forest; the implementation of the National Environmental Policy Act, particularly the need for more timely responses to time-critical issues, and the effects of laws suits and special interest groups on decision making and overall forest management and planning.

## Resources and Multiple-Use

Participants were asked open-ended questions and follow-up probes regarding the values and benefits of forest resources and the types of uses of forest resources. Themes regarding the benefits and values of the SFNF include: biodiversity as an asset of forest resources; the benefits of cultural and subsistence uses of forest lands and resources; the economic benefits to communities of the SFNF; the value of roads and trails; timber as a forest resource and liability; water and watersheds; and wilderness and roadless areas. The themes about multiple-use include issues regarding accountability and personal responsibility in the use of forest resources; access and fees for access; cultural uses of forest resources; recreation; off-road vehicle use; commercial uses such as timber, grazing, and outfitting; problem behavior; and changes in the types of users visiting the SFNF. A summary of the core themes for each of these topic areas is presented in separate sections in the following pages.

## Resource Themes

Themes about SFNF resources concern the benefits and interactions of interested parties with these resources and the benefits and values to communities and the nation. Participants undoubtedly have other beliefs, values, and attitudes about forest resources in other categories than those identified in this work. However, the discussion group process for this work focused on developing those themes regarding forest resources identified by participants.

## Aesthetics

Participants describe forest aesthetics as a valued asset of the SFNF. A varied landscape, diverse vegetation, and snowcapped mountains contribute to a landscape that is described as inspirational and an asset to the setting and lifestyle of adjacent communities. Some participants suggest the presence of the forest and its resources is a contributing factor to either moving to New Mexico or for maintaining their current residence. The aesthetic values and benefits of forest resources are also explicit and implicit in other statements about the connection of individuals and communities to the Santa Fe National Forest. For example, one Las Vegas participant observed:

*I could live anywhere I want, but my choice is to live here surrounded by these mountains and this forest. It is part of my life, part of my family history, and I want it to be part of my children's future. It adds something you can't put into words, but you see it and feel it when you are out in the forest.*

## Biodiversity

Some participants emphasize that biodiversity is a valued resource that has economic as well as non-economic values. Biodiversity is sometimes describes as a component of “ecosystem services” that has direct medical as well as other socioeconomic value (Heal 1998; National Research Council 2002). Additionally, some participants perceive that biodiversity has intrinsic value; and, national forests are valued sources of biodiversity. For example,

*The world has changed. There is a loss of biodiversity and public lands are a unique resource. They are among the last refuges for wildlife. You will not find a Spotted Owl, a Jemez Mountain Salamander, a Northern Goshawk, or any other similar species outside of our public lands. If you look at it from a national perspective ... the bulk of public lands are in the West and the biological diversity of these lands is the primary value of our public lands. The highest value of our public lands now is to protect that biodiversity. The value is not for grazing and not for logging. The true value is in the biodiversity that exists on these public lands. Addressing biodiversity needs to find its way into modern forest planning.*

## Cultural and Subsistence Benefits

Participants describe what can be termed a type of subsistence benefit of forest resources that is also related to traditional lifestyles. These activities include fuel wood gathering, pinyon nut gathering, and hunting. Although some of these products such as pinyon nuts may also be sold, their primary use is for personal consumption. Such resources are perceived to be integrated into the history and lifestyles of communities adjacent to the Santa Fe National Forest. These types of benefits are perceived to be important elements of local custom and culture and they structure expectations about the availability of forest resources.

## Economic Benefits

Participants describe diverse economic benefits to adjacent communities associated with the resources of the Santa Fe National Forest. Although discussion groups emphasized the recreational use of forest lands and resources, there is also a coexisting perception of the Santa Fe National Forest as a working landscape. For example,

*People are bringing a stream of things off the mesa. Fence post materials, pinyon nuts, and other things like that are harvested for lots of uses. In that sense it is a working landscape and it has a huge local economic impact. In the small communities here, a little economic benefit goes a long way, so the forest is important to us economically.*

Both products and the use of forest resources are the sources of economic benefit. Product related economic benefits result from timber and grazing uses and resource related benefits are from services provided such as outfitting and guiding. Some participants also emphasize that particular resources such as ski areas, campgrounds, wildlife, and other assets of the SFNF also provide local economic benefit. For example,

*People come here from all over to hunt elk. It is a big draw that puts people into restaurants and grocery stores and other places where they spend money that is new money for our economy. We want to see that kind of economic benefit continue, but there needs to be some coordination with New Mexico Game and Fish about elk management.*

## Results

Participants also identified at least two under-used resources that have the potential for additional economic benefit to local communities: timber and the Pecos River. Some participants suggest that there is the potential to harvest larger diameter timber while others see the small diameter material as under-used. For example,

*I would like to see some use of the dog hair timber for biomass or other types of plants. There are some other people in the community using some of the timber out there for commercial purposes too. Those types of uses contribute to the economic engines in our community.*

Participants also suggest that with some management changes, the Pecos River could also provide additional economic benefits to local communities:

*The Pecos could be one of the West's famous fisheries if it were properly managed. It could be more of an economic benefit if the Forest Service changed some of its management practices. Where can a family go and have a nice experience and then use the river? It is difficult. The Forest Service has some places where additional campgrounds would benefit people who want to fish the Pecos.*

### **Noxious Weeds**

Prevention of the spread of noxious weeds as well as current Forest Service approaches to responding to noxious weeds are topics identified by participants as important resource issues. Noxious weeds are described as displacing native plants and contributing to fire danger because they are perceived to be pervasive in some areas. The Needs for Change and Desired Future Conditions section discusses potential Forest Service responses to noxious weeds, but some participants expressed concern about the use of herbicides or other chemical responses to controlling noxious weeds.

### **Roads and Trails**

Although participants describe roads and trails as in need of repair and a proliferation of social trails (trails not in the designated trail system), there is also sentiment that trails and roads are the primary means to access the forest for a variety of uses:

*When you ask what is important about the forest, you have to say that the roads are one of the important assets of the forest. It is how I go hunting, it is how my kids get into the forest, it is how the backpackers find their way to the wilderness. Without the roads it would be hard to fight fires and to do maintenance on the campgrounds. The roads and trails are important to the public because it is how the forest becomes our forest.*

### **Timber, Fire, and Forest Health**

The trilogy of timber, fire, and forest health is a prominent theme in the discussion group data. Participants in all four groups connect timber density, assessment of poor forest health, and the potential of and role for fire in this ecosystem. For example,

*We were out on our allotment and I had my son go into the woods with a fifty-foot measuring tape. He did not get a full fifty feet and I could not see him any more because the woods are so thick. We measured off an area and did some calculations and we came up with 2,000 trees per acre. This is one of the big issues the Forest Service needs to consider. These outside*

*groups that are fighting this, they need to realize the rainfall we get here is usually fourteen to seventeen inches a year. In the last four years we have not had a total of fourteen inches. To grow two hundred trees an acre it takes all that fourteen inches. With two thousand trees and acre we are using up all the water. We are saturating the forest with trees and they are so weak that it is an unhealthy forest because we have not done our job. It has an effect on water supply and on water quality.*

Participants believe there is a substantial fire threat associated with this relationship of tree density and forest health:

*The fire danger from poor forest health is a problem and there are ways to deal with it by thinning and controlled burns. We know there is a risk in the controlled burns and everyone around here has seen that risk. They (Forest Service) tend to burn on the low end of the window of opportunity where there is very little risk and it does not remove the woody material that is a problem. Then there is that poor fellow over there in Bandolier (Bandolier National Monument) who tried to burn on the high end of the window of opportunity where he was getting clean burns and moving his forest to where he wanted it. But, that is the risk. The Forest Service is not going to take the risk and stick their neck out and do what they need to do for forest health.*

Participants suggest that natural fires as well as controlled burns are means to address forest health:

*We have too many trees out there and no one in the Forest Service seems to see that the way those of us who have lived here a long time see the problem. Somewhere along the way, Smoky Bear became our worst enemy. Now, we need matches more than we need Smoky. We need more controlled burning and we need to let wildfires go. God created this earth with fire as a way to manage our resources. We are fighting against nature when we suppress every fire than comes up.*

There are also assessments that timber harvesting has the potential to benefit overall forest health as well as provide some economic benefit:

*Timber used to be important to us. It provided a way of life in our community and harvesting the forest was good for everyone and the forest too. But, there is not much real timber harvesting these days, but there is timber out there that could be harvested and it would help forest health to do that. If we don't use it and manage it, then fire will destroy it. We know how to manage it and multiple-use can help take care of it.*

## **Water**

Water supply and water quality are each valued resources associated with the SFNF. Participants describe the forest as a valued watershed that is the source of streams that provide the water for consumption and future growth.

*Water is an important resource for local communities and the forests are important watersheds. I would like to see the Forest Service maximize the yield of water from their forests. We want as much water to come down those rivers and streams as possible, however they need to do it. The municipalities need as much water as they can. So, if the cities don't have water, they can't maintain and they can't grow.*

## Wilderness and Roadless Areas

Assessments of wilderness tend to fall into two categories: (1) wilderness is a valued resource because it is critical habitat for biodiversity and it provides open space and recreational opportunities for forest users; or (2) wilderness is “unused and unmanaged” land that is “barren” and a potential source of fire danger because of the lack of active management. The former perspective is expressed in the following comments:

*There is a silent majority that is not speaking out on the wilderness issues. It is a resource that we need to have places like that, especially for urban folks who do not know enough about nature. They are places that can have a public benefit by educating people about nature and that wild lands are not places to be afraid of.*

*Wilderness areas are one of the essential assets of the Santa Fe (National Forest). It is habitat for wildlife and one of the reserves for biodiversity. We need those kinds of places now and for the future. They are some of the last places where you can go to see natural processes working without human interference and we need to keep some of those places because there are intrinsic benefits from being able to see natural processes at work. They are also beautiful places that are full of wildlife and full of nature. It is a place you can go and sit under a tree and watch a sunrise and appreciate what we have here. We have so little of it (wilderness) that it is important to protect what we have and convert some of the roadless areas into wilderness, especially those associated with watersheds.*

Supporters of this position also emphasize that wilderness has watershed, recreational, and economic benefits to adjacent communities.

The second position about wilderness is illustrated in the following comments:

*Wilderness areas are just forgotten lands. You can't do anything in them or to them. People want access to their public lands and you can't easily access wilderness. They are also a big fire danger. If there is a wildfire in there, it is going to spread and cause a real problem.*

*Wilderness restricts access to people who may not have the physical ability to walk in there. It locks up a public resource. Those lands are completely destroyed from an economic standpoint. The counties are not receiving any income from it. Those lands are set aside and they are going to waste. I don't want to see there is any more of that.*

Each of these assessments of wilderness as a resource entails different expectations about a desired future for designated wilderness areas on the SFNF. And, these assessments suggest a theme for future dialogue about the role of wilderness for this national forest.

## Wildlife

Participants describe wildlife as an intrinsic asset of the Santa Fe National Forest. Some participants suggest there are too many elk and that deer have declined in population along with a perceived decline in open meadows. However, participants also suggest that the forest provides essential habitat for wildlife:

*The Santa Fe (National Forest) has significant diversity in the wildlife population and some key habitat for some T&E (threatened and endangered) species. Wildlife should have a place*

*in how the forest thinks about its future. Wilderness areas are important for wildlife too and we want to see that resource protected so there will be wildlife for all of us to enjoy, whether you are a hunter or a birdwatcher.*

## **Multiple-Use Themes**

The concept of multiple-use is a central topic in dialogue about the relationship of interested parties with the Santa Fe National Forest and other Region 3 forests and grasslands. This dialogue addresses multiple individual topics such as grazing, off-road vehicle use, oil and gas development, access, and similar issues. An examination of the content of these topics and other statements about multiple-use suggests several organizing themes. While these themes are presented as distinct issues, they appear to be connected and part of a larger explanatory framework about natural resources and their relationship to human communities. The substance of these organizing themes and the prominent topics identified in the discussion group data are summarized in the remainder of this discussion.

## **Viability of Multiple-Use**

Dialogue about the viability of multiple-use focuses on the benefits and costs of multiple-use. The benefits are perceived to be ecological, economic, and social while the costs are perceived to be threats to biodiversity and ecological integrity. Participants who emphasize the ecological and socioeconomic benefits of multiple-use tend to assess forest resources as ones that should be used and engaged by humans. This perspective also tends to emphasize the responsibility that accompanies the right to use forest resources. For example,

*My family has been here for four generations. We have participated in our environment and we have done so with care and love for the land. There are a lot of people who do that. We teach our children about the land and we see the results of that and how they value the land. That has been provided because we have access to those public lands. I can't imagine a world where children don't participate in their public lands, but just view them from afar and in kind of an aquarium like environment. I think it would be a huge setback for humanity. If you restrict the diversity of people who use public lands, then we as a people lose something and the forest loses something. The forest needs to look at including all the many users for everyone's benefit.*

Inclusiveness of users is fundamental to this view of multiple-use; and, inclusiveness implies the necessity to address the rights and responsibilities of different user types. For example,

*There is enough room for all kinds of uses, including timber and grazing, if we work together to solve the problems. What happens is that things get to be a problem when not everyone is included in the process.*

The entailed social, economic and ecological benefits of this perspective are illustrated in the following comments:

*Multiple- use is desirable and probably necessary. Without multiple-use, how are you going to fund maintenance of the forest? You just can't make the forest work off of tax dollars alone. They are struggling as it is. If you take away that revenue from the forest, then you are tying their hands on what they can do financially.*

## Results

*Multiple-use can be used to manage the resource. There are areas that need to be thinned and fuel wood gathering can help with that. They could come up with a plan to thin some trees and mark those and then let the people harvest the rest. It is an inexpensive way to do some management.*

*We are dealing with renewable resources on the forest. You have to harvest them to keep them producing. In the process you can go out on the land and enjoy it. The public has to be accountable for what they do when they go out on the resource too. I am just a firm believer in multiple-use and harvesting what is out there. That is what the good Lord put it there for is for us to make a living out there and enjoy it. ... You also need people out there monitoring what is going on and reporting problems.*

The first statement emphasizes the economic benefits of multiple-use activities, especially commercial uses such as timber harvesting and grazing that transfer some of the maintenance and management costs to those users. The second statement describes the perceived ecological benefits that accrue from management activities associated with multiple-use activities. The last statement suggests the perceived mutual benefit of social and ecological conditions resulting from multiple-use activities.

Participants who view multiple-use as threatening biodiversity and ecological integrity emphasize that public lands have value that is intrinsic and not dependent on their use for commercial or other purposes. This perspective is illustrated in the following comment:

*These public lands have intrinsic value. They do not have to be used to be valuable. We have not attended very well to those people who value the forest, but who do not necessarily use it for one reason or another. They may go for a hike or just drive by and look, but they value knowing that the resource is there.*

This perspective emphasizes an assessment of public lands and forest resources as reserves of biodiversity that are threatened by uses that are not as valuable as the ecosystem services and related benefits of forest resources. For example,

*What we hear about with multiple-use is the value of cattle grazing and the money that is made off of timber and those kinds of things. What we don't hear enough about is the value of the goshawk and clean water and undisturbed meadows. A tree is more than timber to cut. A meadow is more than grass to graze. They are part of the open spaces and wildlife habitat that is in short supply. If there is only marginal to no economic benefit from grazing, but it damages this ecosystem, should it be supported just because it is a long-term use? We need to look at the whole set of benefits that come from the forest and not just the ones a few groups have received. All of us have a stake in those resources and we want to see all the values considered when they develop a new Plan.*

### **User Types and Land Ethics**

Participants describe a theme that connects changes in user characteristics with changes in patterns of use, land ethics, and problem behavior. The core of this theme is a basic change in the relationship of users with forest resources. The following statement expresses sentiments about perceived changes in how users engage forest resources

*My family came in here in the early 1900s and J.W. Johnson was the Ranger then. We have gone through a complete set of cycles. We used to have time to spend in the woods. Now, people don't have the time to spend in the woods that they used to. Outfitters used to take people out for two-week trips, then it went to ten days, and then to a week, and now it is overnight trips. That is the amount of time people have now. So, their ability to touch the forest and to understand it and build respect for it has changed. It is not there. People are coming out of the urban centers and they expect people to pick up their trash and they expect people to tell them where to camp and those sorts of things. The forest is out of touch with these types of users.*

Participants contrast users who have a “direct” connection to forest resources with those who have become “disconnected” from an understanding of natural processes:

*In times past the people using the forest had a direct connection to it. There were ranchers and outfitters and timber people who worked in the forest every day. There is not much logging anymore, the number of permits for cows have gone down, and so has outfitting. We have pulled all that support for the forest out. Those folks helped to maintain the forest and watched out for what was happening out there. Now, we have recreational users that do not have the same connections to the forest. ... They come out for a day hike and they don't have that connection to how things get to be the way they are. They just seem to be walking through it and not part of it the way people used to be.*

As suggested in the statement above, participants perceive forest users are changing in the types of experience they desire and the setting for those experiences. For example,

*The types of people using the forest have changed. We have people who walk up on Hamilton Mesa and take a bottle of wine and cheese and crackers and soak up the view. They want good roads to get up there and they think they have had a wilderness experience. ... What used to be a wilderness experience is not what it used to be and what people want from the forest has changed.*

Such expectations about forest experiences are perceived to be related to changes in beliefs about nature and the purpose of natural resources. These changes are perceived to be related to the transition from users who have “direct” connections with natural resources to those who have lifestyles with less interaction with natural resources. For example,

*This has been a working landscape for four hundred years. It has been a wilderness since 1964. It is not a pristine place. What we need is some education about what nature is. There are people who want to experience nature and wilderness as fast as they can. The Forest Service has a responsibility to reach out and get urban folks engaged in more than these condensed experiences where they can learn that this is a working landscape. There are not many opportunities for these people to learn more about nature and how humans are interacting with it. Those folks have the belief that if people do anything in nature then it is bad. There is a need for education by the Forest Service to encourage direct experience and understanding what a working landscape can be.*

Entailed in this theme is the belief that those who have more interaction with resources often have stewardship values not present among more causal users. For example,

## Results

*They have to depend on the natural resource users. There is nobody in the Forest Service that loves those beautiful mountains more than I do. My interest in those mountains is so great, that I want it to be better. I don't want it to be a dump ground.*

The last sentence in the comment above also points to a prominent component of this theme: concern about diminishing land ethics and growing problem behavior. Participants describe dumping, vandalism, poaching, and a variety of other types of problem behavior. The following comments illustrate the types of issues identified as “problem behavior.”

*There are problems with abusive behavior on the forest. For example, the campground near me is so violated that it is shameful. I can't get a Forest Service person to come up there and witness the toilet paper all over the place, going to the bathroom in the creek, and other abuses. We only have one person in the entire District who is a law enforcement person and how can he possibly enforce any regulations whatsoever? Somebody has to be looking at the local level and it is not happening.*

*Making laws that cannot be enforced are ridiculous laws. The lack of enforcement clearly degrades the recreation experience of everyone using the forest. It has become almost a lawless place. I sometimes have to call the State Police because of the problems.*

*You go into any of the campgrounds after a holiday like the Fourth of July and there is so much trash you could almost open a Wal-Mart from what people leave behind. You know, cattle do not bring in trash like people from Albuquerque do. I have taken pictures to show them about it, but they can't do much.*

*It seems one of the main recreation activities in this area has become buying a twelve pack and driving around and then throwing the empties out the window. It is a common form of entertainment.*

Such behavior is attributed either to intransigence or a lack of knowledge about appropriate behavior. Increased fines and more law enforcement presence are perceived to be solutions for the intransigents. For example,

*There are just some intransigents that are going to do whatever they want to do. There are redneck types who think they know it all and they are going to throw their beer cans out the window no matter how much you try to promote a land ethic. The only way to control them is to make them pay out the nose for it and then set a few examples so people know what can happen. I would like to see them get a lot tougher on those types.*

Other users are perceived to engage in problem behavior because they are unaware of the expectations and rules about the use of forest resources. This category of problem behavior is perceived to be amenable to change by education and information. Participants suggest “accountability” and responsibility are values about the use of fore lands that should be fostered by all interested parties, including the Forest Service.

*One of the most important values we need to have about the forest is accountability. Let's not just take, but let's give back. As a grazer, I feel we need to be giving back. My family has done that for as long as we have been on the land and I would like to see more people giving back rather than leaving their trash. Maybe they should be asking us to help them teach people how to use the forest.*

*Right now there is a lack of respect by some of the public. There is a lot of dumping going on and a lot of illegal activity. There needs to be more accountability and they need to manage in a way that they include accountability.*

### **Access to Forest Resources**

The access topic has two prominent sub-themes: the problems associated with increased access and the need for ensuring continued access to forest resources. The former theme contains the belief that growing population and changed recreation patterns are resulting in excessive use in some areas. For example,

*There are areas where the demand is so high that people are doing things that hurt the forest. It may be that we need to charge so that we can limit the access and mitigate the effects. Nothing is free these days and if there are so many people, then the only way to deal with it may be to charge for what you do.*

*It may be that they need to start charging people to use the resource. Things have become so bad in places that maybe the only way to deal with it is to charge people fees and then use those fees to buy dumpsters and to maintain the trails and the resource. There is just no way out of it.*

Fees for use are believed to be inevitable by some users because they perceive no apparent solutions to a decline in forest facilities and infrastructure that cannot be reversed without additional funds. Other participants suggest that user fees are likely to exclude citizens who already pay taxes to support federal resources. These participants also suggest that user fees continue to move national forests to be more like national parks; and, the freedom of access associated with national forests appears to strongly influence the opposition to fees for use. Those expressing these beliefs focus on a desire for developing “sustainable use” approaches that address the perceived problems of over-use and problem uses.

The second component of this organizing theme describes a perception of diminishing access that is related to perceptions about egalitarianism and the availability of public lands for use by citizens. For example,

*I am an ATV rider and I just love those mountains. I am also pretty active in the environmental movement, believe it or not. And, it just drives me crazy when I hear I should be locked out of my mountains. I care about them. It seems elitist to me to say they only have one type of value like biodiversity. By saying that, then the use of that land is limited to a small group of people.*

This theme also entails a belief that access is being limited to forest resources in response to problem behaviors, but no alternatives are provided. That is, participants suggest the need to maintain sufficient access alternatives when certain areas must be closed for management reasons.

*I can see the need to sometimes close a road or a trail, but you can't just limit access without alternatives. They (FS) have to provide some additional opportunities and not just close down the forest because they can't deal with the problems in one area.*

## Custom and Culture

The cultural diversity of New Mexico contributes to uses that have particular meanings. The most obvious example is the use of forest resources by tribal groups for activities such as medicinal and ritual plant gathering and visitation of culturally important sites (Russell and Adams-Russell 2005). However, other user groups also attach cultural meanings to particular activities or associate the use of particular resources with the “custom and culture” of their community. For example, grazing has “traditional” meanings among Anglo and Hispanic cattle ranchers who use the Santa Fe National Forest and other northern New Mexico forests (e.g., Corral 2002; Raish and McSweeney 2003). Similarly, fuel wood gathering, pinyon gathering, picnics, family gatherings at campgrounds or other specific sites, and similar activities are also associated with the lifestyles of northern New Mexico Hispanic groups. Some of these activities are perceived to have associated ecological benefits:

*The forest did not used to be the mess it is now. There were always people out there picking up firewood and gathering plants. It helped to keep the forest clean and it helped the people to live a way of life.*

A sub-theme about this issue is some skepticism about the incorporation of custom and culture issues into forest management decision making. For example,

*We are dealing with an issue on another forest where the Forest Service and other groups are making claims that a timber sale will be a make or break for local communities. They say that traditional Hispanic men will no longer have to deal with driving many miles back and forth to work. They say this timber sale will make a big difference for local communities. Well, we went up to see this timber sale yesterday to see how things are going and the first guy we met was Mexican. And, I have no problem with Mexicans needing to work. They need to work just like the rest of us. But, for local people to argue that there are benefits to local culture and communities and then to hire outside people to do the work does not seem right. That does not seem as if it is doing what it is supposed to do. We need some information about who the jobs are going to when they do those types of timber programs that are supposed to have local benefits. Where are the socioeconomic impacts and benefits? Is it doing what is supposed to do to help local culture? They need to have more than just county and state level statistics and have some local data. ... We will just argue until we are red in the face without some real data to show benefit one way or the other.*

## Off-Highway-Vehicles

Among the most pervasive topics in discussion groups and interviews is the use of off-highway vehicles (OHV) on the Santa Fe National Forest. Supporters of OHV activity suggest that their use of forest resources should be accommodated within a multiple-use environment. These users also suggest the majority of OHV users are responsible in their riding on public lands, but they also acknowledge there are “renegade” users who do not abide by the rules. These users also suggest that OHV users are also likely to increase and desire more access and use of SFNF lands.

*I am with an OHV group and I think we ride responsibly. We work with people in the forest who are trying to promote responsible use. They work at trying to keep the problem uses down, but as the population grows the problems grow. The ATVs are out there by the*

*thousands and the Forest Service budgets are being cut. They have a hell of a dilemma out there with ATV use.*

Participants identified a range of issues about OHV use:

*OHV use has just gotten out of hand on this forest. They need to sit down and come up with some good road closure policies. They need some areas for ATVs and other areas where they can't go. On the other side of the Jemez Mountains you can't go almost anywhere that you don't find ATVs and all the roads they are creating. But, without the enforcement out there it will not matter. It was not long ago that if you were up there hunting, maybe one camp out of ten would have an ATV, but now almost every camp you go by whether it is fishermen, hunters, or campers, or whatever they have four or five ATVs in their camp. It just continues to escalate and it does not seem they have tried to address the real nature of the problem. But, they need some enforcement behind it. You also need people to be accountable in the way they use them.*

Participants suggest OHV use: creates new roads; causes erosion damage; disrupts hunters and wildlife; riders chase cattle; vehicles damage riparian areas; and, OHV use spreads noxious weeds. Some suggest they also contribute to increased fire danger because of off-trail riding:

*It can be dangerous. I think the Fenton Lake fire was started by guys on motorcycles who were out off-trail just messing around. They need some education and they need to understand that the forest will burn if they are not careful.*

Most participants expressed a belief in the need for more effective management of off-road vehicles, including partnerships with OHV groups to promote responsible use, designated use areas, and other management approaches to address resource damage and the disruption of other users by OHV activity.

### **The Emergence of Recreation**

Participants appear to believe that recreation has become the predominant use of the SFNF. As noted previously in the section on Socioeconomic Changes, participants describe a transition from the predominate uses being for timber, grazing, and fuel wood gathering to the use of forest resources for horseback riding, skiing, hiking, hunting, fishing, OHV activity, and a range of other active and passive recreational activities. Recreational opportunities contribute to community quality of life and provide the primary means of interaction with forest resources for contemporary users. Some activities such as pinyon and fuel wood gathering are considered to have “recreational” value as well as subsistence benefits.

### **The Costs and Benefits of Grazing**

Grazing is a topic that is nearly as pervasive as OHV use in the discussion group data. As with the OHV topic, the comments sort into those who believe grazing has ecological and economic benefits and those who believe grazing causes more harm than benefit to forest resources. These beliefs tend to associate with other views about multiple-use and beliefs about the value of forest resources.

## Results

Supporters of grazing generally acknowledge that it is a “cultural” activity for many ranchers and that grazing benefits for forest ecosystems, particularly in the control of undergrowth that can contribute to fire danger. For example,

*As far as multiple-use goes, I think there is room for grazing as long as it is controlled as far as the numbers go. They need to be monitored for where they access water and stream approaches, but in some areas grazing is a good use of the resource. We can to some extent cut down the possibility of fires. It is also a cultural thing in certain areas. People have been grazing for years.*

Participants who support grazing also suggest that ranchers provide an economic and management benefit to the forest through their actions:

*What we pay the forest, the government, is next to nothing. But you are not taking into account what we spend over and above that to provide water, keep the fences up, and a lot of people and wildlife are benefiting by what the rancher is doing on the land. We report what goes on out on the forest to the District. It takes money and time to be out there. So, when you figure out what it takes to be out there and the other costs, it is a lot more.*

*Ranchers have a long-term connection with the land. They are on the ground and know the resource. They have a strong sense of stewardship that is undervalued and can be a benefit to the Forest Service and to the resource by providing a presence and other direct benefits such as water for wildlife.*

Some ranchers also expressed support for the notion of collecting better information to understand the effects of grazing management.

*We want to see reality and not myth in decision making. You need to have good monitoring data. We are ranchers and we support the whole idea of having the monitoring information to know what is going on. I would like to see them do some test plots and demonstrate how managed grazing works or does not work and let that be part of the decision making process.....*

The critics of grazing on public lands also support improved data gathering to assess the effects of grazing on public lands.

*Cows are a big issue and they have to deal with it. It is one of the most contentious issues that exist here and because of that they may resist dealing with it. At some point, it has to be dealt with and they have to have solid information to make decisions about grazing. ... We have a strong position about cows on public lands. We don't believe they should be there. We don't believe they are sustainable on these public lands. With that being said, we are not going to have any faith in their decision making until they show us the information that shows that cows and wildlife can coexist and that cows and water quality can coexist. That is where the rubber hits the road. They have to show us that information. They have told us over and over again they will show us that information and they don't.*

These critics also suggest that grazing is “subsidized” and that ranchers are not paying enough, despite whatever management benefits result from permitted grazing on the SFNF. For example,

*I have tried to get a straight answer from them (ranchers) about their costs (for grazing on Forest Service managed lands) and they always say, 'it depends.' I have read some reports like the recent one from the GAO (General Accounting Office) about subsidizing grazing, and I am not sure that we tax payers should do that. We can have grazing on public lands, but shouldn't they pay a fair price for it? I think there is a place for grazing, but I sure do think they should pay their fair share. I know if they had to pay on the forest (SFNF) what they do at Valles Caldera, we might be getting a better return on our resources.*

These critics also suggest that habitat damage and other ecological disruptions associated with cattle grazing are not worth the economic and management benefits suggested by grazing supporters. For example,

*On livestock grazing, I have not seen a mountain meadow that has not been hampered by livestock. Riparian areas are also trampled by livestock. These are key wildlife features on our public lands, especially the riparian areas. We seem to allow livestock grazing in these extremely dry times. The plants are dying and it is because of overuse (from grazing). It is just criminal. I think there are solutions to livestock grazing, but to ignore the problems is very shortsighted. The problems are manifest in water quality and in problems with wildlife habitat.*

*Livestock use of the national forest is a historic use of the forest that should be phased out. If you could demonstrate to me areas where livestock grazing is sustainable, then I would be happy to look at it. ... I know that there are places where it has cultural importance and that can be dealt with. There are buy out programs ... and other ways that could be dealt with.*

*Cows impact habitat because of their presence and use of grass, but there is also the indirect stuff. Because cows are on the land, the government controls other populations of wildlife. They call in predator control. So there is the direct impact of cows on water and water quality and other direct and indirect impacts on wildlife.*

*We know that cows have cultural importance for some groups. But, the question comes down to serious socioeconomic issues in these rural communities. And the question is if a hugely subsidized grazing program on federal land addresses those issues? We need to look at that carefully. ... Some of those groups have always had cows on these lands and they think of them as belonging there, but we need to think through that issue.*

In response, the supporters of grazing suggest that it is not cows per se on public land that is the issue, but management approaches backed by data that can assess the role of cattle grazing on the Santa Fe National Forest:

*Some people have blamed livestock for everything that is wrong with the national forest. For the record: cattle cannot think, but managers can think. We (human managers) are the ones to blame. Cattle are not the blame. Cattle do not overgraze, it is the land manager that lets the cattle overgraze. So, we need management plans that allow cattle to be a part of the forest.*

## **Timber**

Beliefs and values about timber have the same general framework as those about cattle grazing: there are supporters who see timber harvesting as a sustainable use of forest resources that has ecological benefits to the forest and economic benefits to local communities. These supporters

## Results

emphasize the contributions made to forest conditions by timber interests; and, they perceive the decline in forest conditions as directly associated with a decrease in the presence of a timber industry:

*Timber used to be a part of the multiple-use of the forest. Now, there isn't much at all. There is some around here and there, but not much in comparison to what it used to be. There could be more if it is managed right. It has a benefit for the forest. It keeps things thinned out. It can provide jobs for people. We used to have mills here that supported the whole community.*

Sustainable timber harvesting “done right” is believed to be an acceptable if not necessary use of forest resources among some discussion group participants:

*Now, you have probably seen some desecration of forestlands where logging was not done properly. But, when it is done properly, it is not a problem. What is happening now is that the forest is burning up because it is not harvested. If it is done right, then the forest benefits and will be here for the future. But now, it is just a big fire waiting to happen. There is some of the biggest and best timber around here. I was talking to a fellow over in Espanola and he said that if they logged out some of that timber they could run every mill around for two years and it might get a quarter of the good timber out. But, as far as I know they have not taken a log out of there. It may be too late and it is all going to burn up and not get used.*

Other participants suggest the Santa Fe National Forest has some exceptional examples of appropriate timber harvesting that benefits ecological conditions and local economies:

*I have a chance to see timber management on a number of forests. And, one of the things I am seeing is that on three Districts the Jemez, Cuba, and Coyote have had good success in getting their sales through the NEPA process. They have had good leadership on those Districts and they are effective in getting things done. ... There is some good benefit to the forest for those sales and people are making some money. Isn't that what is supposed to happen in a multiple-use forest?*

## Needs for Change and Desired Conditions Themes

Dialogue about the Santa Fe National Forest also expresses a range of assessments and beliefs about the needs for change and desired conditions for forest resources, multiple-use, and forest management. Participants expressed these beliefs and values in response to direct questions about the needs for change and also in the dialogue about other topics and issues. Some of these issues are explicit or implied in previous sections of this report, but are repeated here in order to emphasize the prominent assessments about needs for change and desired conditions.

These comments are presented in the same topic categories that organize the rest of this report: the planning environment; resource issues; and, multiple-use issues. These beliefs and comments are briefly identified here as a starting point for dialogue between interested publics and SFNF managers about the future of the Santa Fe National Forest.

### The Planning Environment

Discussion group participants expressed different degrees of knowledge about the process for forest planning and management decision making. Some of the best informed have read the Forest Plan while others appear to have only limited knowledge about the purpose and content of

a Forest Plan. This suggests the need to ensure that interactions with interested publics regarding the Forest Plan provide information about and access to the existing Plan document.

The following comment expresses a theme about the desire for SFNF managers to follow through with existing commitments identified in the Forest Plan:

*I read the Forest Plan before coming to this meeting and I have a new appreciation for what they are supposed to do. They have their hands full just doing what the existing Plan says they are supposed to do. So, I am wondering if the real issue is the need for change or just the need to carry through on what they already are supposed to be doing.*

A compliment to this sentiment is a belief in the necessity for updating the existing Plan to match social, economic, and ecological conditions. For example,

*The existing Plan has a lot of things in it that they don't seem to be doing. The Plan is some eighteen to twenty years old and it needs to be updated for sure.*

Other topics about the planning environment concern the need for management and planning flexibility, a desire for more data to monitor forest conditions, developing partnerships with interested publics, and engaging in constructive collaboration with interested publics. Each of these topic areas is summarized in the following sections.

### **Management and Planning Flexibility**

Participants believe there is a need for more management and planning flexibility and the use of “common sense” rather than rigidly following plans and guidelines. For example,

*The planning process and the Forest Plan need to be more flexible. In the past I have seen a situation on other forests where there was a Forest Plan requirement to fence a spring so cattle would not get into it. On that particular allotment they removed all cattle but they still did the fencing because it was a Plan requirement. That is so rigid that it does not make sense. They have to be able to use common sense. They have the common sense they are just working under a Plan that does not allow them to use it.*

An assessment of “rigid” management practices that participants desire to see changed is expressed in the following comments:

*You have to have the flexibility in the planning process to change as social or environmental conditions change. But, you still need the checks and balances in place that keep someone from going off on their own tangent.*

*It used to be you could sit down and talk through the process with them (Forest Service). They would have a document that supports a decision and you could sit there and talk with them about it. They used all their documentation as a basis to work from and not as a bible.*

The most focused comments about the desire for more management flexibility concerns the perceived “archaeology bottleneck.” For example,

*They need to have more flexibility to deal with the archaeology bottleneck that appears to hamper getting projects completed. I don't know what they need to change, but something has to improve so projects can get done on this forest.*

## Results

*Resolve the bottlenecks in archaeological projects. Either increase staffing or contract the work to get some things done. As part of their future planning, they need to facilitate getting things done. Even the archaeologists are frustrated and they need to do something to break the bottleneck.*

Other desires for changes in management include the following topics:

- Increase the presence of law enforcement personnel.

*I would like to see more law enforcement that can deal with the trash, the off-road vehicle problems, the campfire out of control problems, and other types of problems that could be mitigated by more presence. There are just more visitors coming from Albuquerque.*

- Develop educational approaches and materials to compliment law enforcement efforts to respond to illegal activity and problem behavior.
- Increase the presence of Forest Service personnel “on the ground” to provide information about forest uses and resources and to gather information about forest conditions for more effective planning.
- Invest Districts with more decision making authority that can be responsive to changing conditions and the needs of users.

*It seems like people in Washington are managing the forests at the District level and they don't seem to know what is going on. I would like to see people at the District have more free reign to manage for local conditions. You can't sit in Washington D.C. and say, 'we need to do such and such on the Coyote District' and have that work. There is a lot of disconnect between the District level and headquarters in Washington. A lot of good intentions get lost in the process.*

- Promote consistency among Districts in management policies and procedures.
- Foster a management environment that acknowledges the experience and expertise of Forest Service staff.

*The people on this forest are fine. They are working hard to do what they can. It is not the people that are the problem it is the system. The system is broken and needs to be fixed.*

- Develop and implement a drought management plan to address existing environmental conditions.

## Monitoring and Data

A prominent topic in all discussion groups is a desire for data about existing forest conditions. Discussions about recreation, timber, grazing, roads and trails, socioeconomic conditions and other topics suggested a desire to have monitoring data that can be referenced as a basis for decision making. For example,

*In the past, funding priorities or political issues or other things have resulted in a lack of data to show why they make certain decisions.*

*If they expect trust in their decision making, they have to have site-specific data and (have that available to the public). To some degree, they also have to be reasonable. By that I mean, they need to have the factual evidence to support their claims and not just their opinions. Some things just don't happen the way they say they do because there is other information that contradicts what they say. So, they just need to be reasonable and show us why they are saying what they are saying is true.*

Some participants describe existing decision making as compromised by an absence of “on the ground” data:

*They have a lot of problems and many of them go right back to the need for data. There is a disconnect between the empirical data on the ground and the decisions being made. There is a lack of basic on the ground information to result in informed decisions. Whether it is wildlife, water quality, long-term productivity of the land, or almost anything ... the data are usually not there. Without on the ground data it is hard for the agency to manage and it is hard for the public to participate and be informed as we have a right to do under NEPA (National Environmental Policy Act). ... It is what someone called 'data free analysis and analysis free decision making.' ... That did not use to be the case ... but the agency is being pressured to crank out decisions ... without data-informed analysis.*

## **Partnerships**

Beliefs about the need for partnerships appear to be strongly held by a range of stakeholders. These stakeholders perceive the agency as lacking in funding, personnel, and management capacity to respond effectively to existing challenges to forest conditions. A perceived solution to these circumstances is the belief in the need for agency-public partnerships to restore and improve forest conditions. However, participants suggest the existing environment for such partnerships needs improvement:

*There is no sense of partnership with the agency. We beat our heads against the wall in trying to work with them.*

*There isn't a sense of partnership and now they need it more than ever. We are trying to work with the forest on a project and we have beat our head against the wall trying to be a partner and trying to help the Forest Service to manage a resource in which we have mutual interests. It is a nightmare. It is nerve wracking. The lack of continuity there is a huge problem and the attitudes about being partners are a problem.*

*Control is a huge thing in the way they manage the forest, but they can't control the forest anymore. But, they still have those attitudes that they need to control everything. But, they need partners and they need to share in the management responsibilities. They do not seem to have grasped that in order to get something done on the ground; they need the people behind them to get something done. If they don't get people behind them, nothing is going to happen.*

Changing the environment for partnerships can be accomplished by (1) recognizing the stewardship values and knowledge of stakeholders who can provide information, labor, and organizational resources to assist the Forest Service; and (2) working cooperatively with stakeholder groups to address educational and other needs to improve forest conditions. For example,

## Results

*I think some more road signage like 'don't throw your garbage out the window' would help too. There are a number of things they could do with partners to help educate people about what is expected and the 'do's and don'ts' of using the forest.*

*There is a lot of local knowledge here that maybe does not have a lot for formal data behind it, but it has forty or fifty years on the ground of knowing how things operate such as where the water is. There is no blending of grassroots knowledge with what the agency is doing. It is their need to control and not give up anything.*

*They need to partner with the entire range of neighbors they have. It has become a complex place and we are all living in it together. People have figured out that when a fire starts on the forest it does not stop at the fence you put up. If they manage the forest as a system and they think of their neighbors as part of the system, then we are all better off.*

*They do not appear to be hearing us. We tell them what we want, but they do what they want without any apparent consideration for what we told them we wanted. There is no feeling of choice and no sense they care about public input. Feedback from them is rare. There is a lot of local knowledge and expertise about what can be done, but they are not using it.*

The strength of sentiment about the need for partnerships cannot be over-stated. Interested publics see partnerships as a necessity and not as an option for the future of forest management:

*Creating partnerships is the only future for the forest. They need to have the support from the public to maintain the forest, to do law enforcement, and to educate people about the needs of the forest.*

## Collaboration

Consistent with the desire for partnerships is an expressed desire for more agency-community collaboration regarding day-to-day management and forest planning. Some of the perceived impediments to such collaboration are expressed in the following comment:

*They need to change that ivory tower approach. They talk down to us all the time. They say it is their forest, their direction, their plan. There needs to be more consideration of what the public wants.*

Participants were also explicit about their expectations for the process and content of collaboration:

*We want to have collaboration up-front. They are saying that, but they need to make sure that they do more than just have a listening session. There needs to be serious consideration of what we (publics) have to say about the forest and its use and value.*

*Our expectation is that collaboration will be face-to-face and not through some process where the public is kept at a distance. We want to engage in discussions with them and with the resource specialists about the data they are using to make decisions. We also think there needs to be agreements that are put into writing so they are accountable in the collaboration process.*

*A model the Forest Service really needs to look at is the BLM RAC (Resource Advisory Committee). It is made up of citizens with different points of view. It is such a powerful tool and I would like to see them do something like that.*

*You need to have the resource people involved in the communication part of collaboration. Maybe the Range Conservation guys don't like to talk or be in public meetings, but they have a passion for what they are doing and they should be the ones talking with the public and not the public information person who may not know the details. I think collaboration is a better process if you have the resources specialists involved.*

The relationship of collaboration to decision making is also an expressed concern:

*They have made a big deal about collaboration and working with people up-front in their new Planning Rule. That is all fine, but they have to make a commitment to actually listening. They also need to concede something in the beginning, but they seem reluctant to do that. They like to listen, but actually conceding something is something they need to do. ... Collaboration means parties with different goals and objectives come together to try to find some zone of agreement and to do that they have to concede some portion of their agenda ... all parties do. We have come forward with some willingness to do that and the Forest Service looks as if they are going to do that and plays like they are going to do that, but in the long run are they going to do that? They don't have to give up the ultimate decision making power, but they do have to come to the table and say that they are willing to come to the table and give up something that is part of their agenda. We expect some give and take. We have not seen much give and take at the project level, but we are not sure what will happen in forest planning. Collaboration has worked in some instances on a small scale such as the Collaborative Forest Restoration Plan ..., so we will see what happens.*

Similarly, participants also express concern about structuring a respectful and civil collaboration process that fosters inclusiveness:

*I have been involved in a lot of planning processes and review processes with the Forest Service over the years. And the process has not been very comfortable. Competing interests get involved and there may be some contentious behavior. So, some people you hope will be involved do not get involved because the process is not comfortable. So, the outspoken advocates of a cause or idea come forward, but a lot of the average public does not get involved because they are scared off.*

## **Resource Issues**

Participants expressed needs for change about diverse topics, concerning forest resources, but the most prominent in the discussion group data are: fire management, forest health, noxious weeds, water, wildlife, and wilderness.

### **Fire Management**

Participants connect the threats of catastrophic fire with forest health. These topics are distinguished here only to highlight the emphasis on fire management issues in the discussion group data. The major themes about need for change in fire management are the following:

## Results

- The potential for a catastrophic fire exists and there is a desire for the agency to anticipate the potential causes and the appropriate responses to these threats.

*It is a firestorm waiting to happen out there. They need to face facts that if it starts, all they can do is run from it. It is going to damage a lot of property in the county and that will have negative effects on the county tax base.*

*I would like to see more anticipation of fire danger. If they need to close the forest to make sure that fires do not start. If they do not have the enforcement capabilities to make sure there are no campfires, then that policy does not work. If they cannot enforce, then they need to close areas of the forest that are potential fire problems. Some sort of fire management beyond where they will thin or do control burns. They need more of a fire management approach than signs that tell us to bring a bucket and a shovel.*

*Our community is involved and interested in reintroducing fire into the ecosystem. They are not playing straight with us and if they don't then, we will work to do what is best for the resource. There is local support for thinning projects but it does not seem to be in their plan for managing fire danger.*

- Foster education about the necessity of fire in forest ecosystems:

*Many people don't want to burn at all. If they open their minds a little bit, then they realize that you either burn when you are prepared or when you are not prepared. So, maybe they go kicking and screaming with the idea that you burn when you are prepared because they realize that it is not a healthy forest right now. Something bad can happen even when you are prepared, but I would rather have the engines there and ready than not burn. Now, some people may think that it may never burn or that we can stop it from burning, but I don't think that is an option that nature provides.*

- Anticipate the threats of fire by developing plans that incorporate natural as well as prescribed fires into management approaches:

*I would like to see some natural fire management plans. I would like to see them use ... natural fires. If there are no homes or no other dangers, then they should think about how to use natural fires to improve conditions on the forest.*

*I really support prescribed burning. It is something that is necessary to protect the health of the forest.*

*The forest does do controlled burns, but it is a few hundred acres at a time. They have a few hundred thousand acres that need burning. It will take until my great-grandchildren before they have burned enough to make a difference.*

- Some participants suggest that fuel wood gathering and timber harvesting are also approaches to managing fire danger:

*One of the things they could really do is open up the fuel wood gathering so that it would take some of the dead and down (trees) out of the forest. It is wood that could be used and there isn't any reason they can't do that. Here on this District (Jemez) they have a model program and it has been successful. They should do more of what the Ranger is doing here and it would help forest health and the fire danger too.*

*If they would let some timber sales go through, it would also help the fire danger. But, they will not let anyone cut wood. Timber sales are another way they can control fire danger.*

## Forest Health

Participants emphasize a belief in the desire to change existing forest conditions to a more healthy state. The following are among the prominent forest health themes:

- There is a perceived need to shift from management approaches that are focused on fire to those that are based on forest health.

*I would like to see a shift from fire to forest health. Fire is just one piece. There does not seem to be any thinking about long-term management. They are doing a band-aid here and there and I would like to see a change from just fire to a focus on forest health. I would like to see multiple values as well as multiple-use considered in forest health. Water, grazing, recreation, wildlife, and all the values that come out of a healthy forest require management. It is just not fire. The whole goal should be to get it back to a healthy forest.*

- Decisions about multiple-use activities should have forest health as the most important consideration.
- If forest health is the management priority, then other concerns about multiple-use and resource conditions are likely to “fall into place” because forest health is perceived to affect all other forest issues.

*By improving the health of the forest it will help wildlife, grazing, timber, and everyone who uses the forest. That needs to be the focus. If there is a healthy forest, then things will fall into place. If it was healthy we could have natural fires that are not a problem.*

## Noxious Weeds

Participants expressed a desire for more management attention to noxious weeds. Various participants expressed concern about the use of herbicides and other chemicals as appropriate management activities because of their perceived environmental and health consequences. For example,

*Currently, we are working to stop the forest from using herbicides to control noxious weeds, to limit burning in thinning projects, and stop the use of fish poisons to kill non-native fish.*

*Besides the forest value of providing a practical refuge for chemically sensitive people, to those of us who have become acutely aware of how toxic our world has become, we have an exquisite respect and place a very high value on clean land, air, and water, such as that in some forests especially wilderness areas, which are some of the last unpolluted places on earth.*

*FYI - According to a New Mexico Department of Health survey, 16% of respondents to a population-based survey stated they were unusually sensitive to common chemicals, like cleaners and bug sprays, and 2% said they had been diagnosed with multiple chemical sensitivities (MCS), the more severe form of the condition. Many people with MCS are so*

## Results

*impaired as to be disabled by the condition. For these individuals, keeping the forests free from toxic chemicals is (important) ....*

### Water

Participants expressed the following themes about needs for change concerning water:

- Water should be a higher priority in consideration of the resources for management on the Santa Fe National Forest. The forest is an important source of water supply and management decisions also affect water quality for consumption and wildlife.
- Water supply can be influenced by thinning the number of trees per acres. Timber harvesting and thinning combined are perceived by some as capable of improving water supply.
- Watersheds are among the most important resource of the Santa Fe National Forest, but they are threatened by grazing activities that need more active management.
- The interaction of grazing and wildlife populations, especially elk, needs to be assessed to manage watersheds effectively.

### Wildlife

Participants acknowledge wildlife as a valued forest resource that has economic and intrinsic benefits. Some participants desire to see wildlife have a higher priority in planning and management decisions. Two prominent themes are illustrated in the following comments:

*We would like to see some stronger protections for endangered species. In our opinion, they (FS) have weakened protection for those species through some management actions they took last year. The Mexican Spotted Owl is an issue and we also think there are lynx on the Santa Fe. So far, they have refused to acknowledge that lynx ever occurred in this state, but we think they are here. There are some scientific papers that support lynx here and we are arguing they should consider lynx in their planning as well as black-footed ferrets. ... There are some serious endangered species issues that merit a second look in this round of planning.*

*They really need to pay attention to wildlife management and especially elk. In some places they say that there are too many elk and in others not enough. It is the same with deer. You need to do timber sales to create habitat for deer. In the future I would like to see them manage more for wildlife because that is what the public wants is more elk and deer.*

### Wilderness and Roadless Areas

Participants also identify wilderness and roadless areas as topics for consideration in Forest Plan revision. Among the prominent themes about needs for change or desired conditions are the following:

- Roadless areas should be protected from any extractive uses such as timber harvesting and oil and gas development.
- Some participants see limited value in roadless areas because they restrict access and the capacity to respond to wildfires.

- Some participants suggest they desire no additional wilderness areas on the Santa Fe National Forest.

*I don't think we need anymore wilderness areas. What we have right now is isolated and you can't get to it. They can't take care of what they already have and I don't think we need anymore that they also could not take care of.*

- Other participants desire to see an expansion of wilderness, especially the incorporation of some roadless areas into the existing wilderness system.

*There are some areas that deserve wilderness protection and some of those areas are in the roadless designation now. We would like to those areas become wilderness because of the values they have for society and for the ecosystem.*

*Wilderness is an asset because in comparison to developed places, there is very little of it (wilderness). It is absolutely critical as an anchor and refuge for biodiversity. We have a moral obligation not to trample the rest of creation. We have an obligation to make sure that every critter that inhabits this earth has its space and can have the opportunity to thrive. So, there is an argument for expansion of wilderness or at least protection of roadless areas because they are usually adjacent to wilderness. The economic argument is also clear. There are two studies that have been done. One is in Arizona and one is in Oregon. The study in Oregon found that the economics of counties with protected areas, including roadless and wilderness, were doing as well or better than counties without. The Sonoran Institute in Arizona looked at actual dollars and income and said that basically those counties with those protected areas bring in more money from non-traditional sources versus traditional sources. So, there is an argument these protected areas are a source of income (for counties and communities). They attract people who can spend money like retirees, recreationists, and people who move to those areas because they like those amenities. So, I think expanding wilderness or bringing roadless areas into the wilderness system has benefits.*

- Examine wilderness as wildlife habitat. Also consider the interaction of areas adjacent to wilderness, especially those adjacent to the Pecos Wilderness, as “critical wildlife habitat.”
- A contrary theme is that wilderness areas need additional management and more access:

*I want to see them do something about the health of the wilderness areas. They are very unhealthy now. It is an eyesore now compared to what it used to be. We need to do something to help it and that may take some management.*

*We asked them to put up some trail signs in the wilderness, but they said they couldn't. I don't understand because wilderness areas are there for the public to use them that is why they are there. They are there for our use. They are designated so the public can go and experience and untrammeled area.*

## Multiple-Use Issues

The discussion group data concerning multiple-use indicates specific topics about the needs for change and desired conditions. These specific topics also express more fundamental values about the purposes of nature that give these individual topics different meanings. For example, participants who have utilitarian values and beliefs tend to view multiple-use primarily in terms

## Results

of its social and economic benefits. Participants who hold what can be termed “intrinsic” values and beliefs evaluate multiple-use in terms of its benefits and threats to ecological integrity and biodiversity (cf., Kempton, Boster, and Hartley 1995). Similarly, those with utilitarian views evaluate cattle grazing as an asset to forest health, a benefit to the custom and culture of ranchers, and as providing economic benefits to adjacent communities. For those with “intrinsic” values and beliefs, cattle grazing is evaluated as inappropriate for the southwestern ecosystem, a threat to riparian areas, and providing little economic benefit in relationship to the potential threats to ecological integrity.

Although the utilitarian and intrinsic perspectives are not the only ones affecting public beliefs and values about resources and multiple-use, they are commonly expressed in participant comments about these issues. This suggests careful attention to clarification of the values and beliefs about particular issues in public dialogue about these topics.

The prominent topics about multiple-use needs for change and desired conditions includes, access, custom and culture, economic development, ethics and law enforcement, grazing, off-road vehicles, recreation, timber, and trails. The specifics about these topics entail some common questions publics appear to be asking about multiple-use issues. For example, these implicit and sometimes explicit questions include:

- Can forest-health be maintained without the incorporation of traditional multiple-use activities such as grazing and timber harvesting that generate funds to apply to forest management?
- What is the role of the forest in protecting resources for future generations?
- How will the agency respond to a change in land ethics and problem behavior so that forest resources and the experiences of all users are respected?
- Can multiple-use management be updated and adapted to respond to changing social, economic, and ecologic conditions so that sustainable use and responsible use are fostered?
- How can social, economic, and cultural connections of communities with national forests be included in management decisions? And, what is the role of multiple-use in providing social, economic, and cultural benefits to adjacent communities?
- Should multiple-use management consider restricting or regulating more aggressively any use that disrupts ecological resources and the experiences of other users? That is, should every use be accommodated regardless of its potential effects on the environment and other users?
- Should those who live adjacent to national forests have more influence on decisions about multiple-use than non-local or “national” interests that also value national forests?

Such questions suggest some of the fundamental values about public lands and the meaning of a “national forest” that influence beliefs and values about multiple-use management. For example, the following comments express the egalitarian values and beliefs about national forests as “open to everyone” that affect views about multiple-use:

*Where we start to get into trouble is when we start excluding groups of people from using the forest. It is a big enough landscape that we can find a place for every use. We have excluded the loggers, we are reducing the grazing, and we can't do that. I don't care for four-wheelers,*

*but I think there needs to be a place for them. They can't be everywhere, but even though I don't like them much, it is a national forest and we need a place for everyone. So, I guess it is one of those things there is room for everyone but not in every place.*

*Everyone has a right to use the forest. But, there are problems in how people interact out there. Those competing uses and values, they need to think about the potentials for different uses and figure out a way for all folks for people to get along.*

The specific topics noted below about needs for change in multiple-use management should be considered in relationship to the implicit models (e.g., utilitarian and “intrinsic”) about nature and the questions noted above about multiple-use implied by those models.

### **Access**

As population increases, there is a perception that there will be increased demand for the use of forest resources and the need to accommodate increased access. Participants expressed a desire for more access points, more attention to recreation access, improved road and trail maintenance, public input about road closures, and attention to rights-of-way issues that may affect future access if private lands adjacent to forest boundaries are developed for residential use. Some participants stressed that access is a key issue for future management planning:

*Unless people can use the resource, then people will not be able to support it. If you lose that support, then you lose the resource. The key to that support is access. They have to make access issues central to how they think about management in the future.*

### **Custom and Culture**

Traditional activities such as grazing, fuel wood gathering, and pinyon gathering are believed to be important uses to incorporate in future planning and management plans. Participants expressed a desire for planning and management to assess the ecological and socioeconomic benefits and values of these activities as part of a multiple-use management approach.

### **Economic Benefit Tradeoffs**

Some participants believe forest resources have the most value as reserves for biodiversity; and, any commercial activities should be evaluated in terms of their contemporary and future effects on biodiversity. Other participants desire economic benefits from the use of forest resources to be more prominent in agency planning and decision making. These participants suggest that history is an indicator of the potential ecological and socioeconomic benefits of measured and sustainable management of forest resources.

### **Ethics, Education, and Enforcement**

This trilogy of concepts is pervasive in the dialogue about multiple-use. Participants perceive a precipitous decline in land ethics that is degrading resources and user experiences. Increased enforcement is one desired change that participants suggest may address part of the problem associated with the effects of declining ethics and increasing problem behavior:

*Where does enforcement fit into multiple-use? If you have dumping going on and ATVs running all over the place, wouldn't more enforcement help? There is an enforcement problem*

## Results

*on the forest. There is tagging that goes on and campground destruction. Unauthorized vehicles on trails and other things like that are a problem. The Forest Service is trying out there, but there is only one law enforcement person for this whole area. When you see their ability to respond, it is just too limited. It is not effective right now.*

Participants also emphasize a desire for more emphasis on education and the promotion of land ethics:

*If you just use a forest as a dump ground or a party place, then it loses its value. Some kids know more about the Amazon rainforest than they do our forest here. ... There is a need to educate people about our forests. They should be in the schools teaching people what that resource is so they grow up understanding what it is so that when they go out in it, then they will respect it. This is an opportunity for them to make a difference. If you can educate the people not to tear it up, then it is going to help the resource and the people who use it.*

*The other thing that education will do is help people to understand what they should and shouldn't do in the forest. They always say that they don't have any money to do those kinds of things, but if you partner creatively with people and the people buy in to what you are trying to do, then there are ways to come up with the money. The community will help out with that education effort.*

*They have this huge classroom for children and adults and it could be tapped very easily.*

Promoting land ethics through partnership education activities and identifying the enforcement alternatives if education is insufficient are perceived to be important needs for change in future planning.

## Grazing Management

Grazing and timber are issues that appear to sort discussion group participants into two distinct groups: supporters who argue there is a place for such uses if managed properly and those who believe past management indicates these activities result in more harm than benefit to forest resources. Grazing interests perceive they are providing a benefit to forest resources by controlling vegetation that contributes to fire danger, providing on the ground management of their allotments, providing water for wildlife, and their sense of stewardship provides a wider set of benefits for forest health:

*We are interested in the resource and we always want to make sure we leave enough forage for wildlife when we move off of a pasture. What I would like to make sure of is that the Forest Service works with the local users and that they do not dictate the operating plan, but they work with the users to come up with the plan. This will be what is best for the resource.*

The middle-ground participants expressed sentiments consistent with the following comment about a desired future for grazing management:

*I would like to see them be proactive about grazing management. We have the full gamut of grazing practices, from good to bad. It is the bad ones that cause the public sentiment against grazing. Instead of using grazing as a tool to restore, enhance, and maintain healthy meadows and forests, the resources are not put into it to make it a tool for forest health. So, you get conflicts with things like recreation that do not need to be there. There needs to be*

*creative ways to think of using grazing as a management tool. It is not a management tool the way it used to be and make it a positive instead of a negative. Grazing is an opportunity and not a liability and future management needs to think of it that way.*

### **Off-Road Vehicle Use**

Off-road vehicle use is noted by the full spectrum of interested parties as an area in need of management attention in future planning efforts. Participants acknowledge there are responsible users, but there is also recognition that a limited number of irresponsible users can cause significant resource damage and disrupt the experiences of other forest users. The strongest advocates of multiple-use suggest there is a place for every use, including OHV activity, although there may need to be designated areas or “sacrifice” areas that contain this activity. Other users advocate restricting OHV use to trails, except for special circumstances such as when ranchers use them on grazing allotments. Management approaches that respond to increased demand, changed OHV technology, wet-season use, the need for signage, and growing problem behavior such as off-trail riding are perceived to be important needs for change.

### **Recreation**

Recreational use is increasing and the patterns of recreation are changing to more users who have limited time to experience forest resources. Participants expressed a desire for recreation facilities and planning that provide for the education of users and the design of facilities that match user characteristics. This implies the need to understand more about the character and quality of user experiences and the expectations about recreational activities. Participants also emphasize that recreational uses such as hunting and fishing are affected by interagency management issues that need more attention in the future, especially cooperative working relationships between the SFNF and New Mexico Game and Fish:

*I would like to see them work more and cooperate with New Mexico Game and Fish. They need more coordination about elk management and deer management. They could also work with them to develop the Pecos River as a world-class fishery. They have to be willing to partner with organizations to help them to develop that potential. We have a great recreational resource that needs more attention, especially with the number of people coming to use it.*

### **Timber**

There are four themes about needs for change and desired conditions in timber management:

- Develop a fuel wood program that is sustainable. Participants expressed a desire for a program that has administrative flexibility, ecological benefits, and one that acknowledges the cultural and economic benefits of fuel wood gathering.
- Timber sales should be evaluated for their potential economic and ecological benefits. Participants suggest the economic and ecological considerations are not necessarily in opposition and there is the potential to develop a timber program that can address each of these potential benefits.

*Why can't the Forest Service set aside some timber so the industry that needs that predictable supply of lumber can come in here and set up a business? We know that without the*

## Results

*guarantee supply, they cannot make the investment. So, maybe in the Plan they need to say they are going to set aside so much timber and fight that through court so we will have some timber industry to help out economically and with thinning the forest.*

- Stewardship contracts are a means to provide economic benefits as well as engage in thinning that can reduce fire danger and promote forest health.
- Reduce the overall density of trees to promote forest health:

*I would like to see them get some of the wood out of the forest, but the truth is that there is more crap out there than good logs. There are good logs but there is so much crap that it needs to come out before you can do anything else.*

*What we need on this forest is an approach to timber that recognizes that trees are a renewable resource. We need an approach that recognizes that without more management, we are going to have a conflagration and there will be no more forest. Reduce the tree density. Do whatever you have to do, but reduce the tree density or what we all love about this forest will disappear in a heartbeat.*

# References

- Agar, Michael , and Jerry Hobbs. 1985. How to Grow Schemata Out of Interviews. In Directions in Cognitive Anthropology, edited by J. W. D. D. (ed.). Urbana and Champaign: University of Illinois Press.
- Bernard, H. Russell. 1995. Research methods in anthropology : qualitative and quantitative approaches. 2nd ed. Walnut Creek, CA.: AltaMira Press.
- Bureau of Business and Economic Research. 2006. Socioeconomic Assessment of the Santa Fe National Forest. Albuquerque, NM: University of New Mexico.
- Corral, Patricia. 2002. Rio Grande de los Ranchos Watershed Ethnographic Study. Taos, New Mexico: Carson National Forest. December, 2 2002.
- Emerson, Robert M., Rachel I. Fretz, and Linda L. Shaw. 1995. Writing ethnographic fieldnotes. Chicago: University of Chicago Press.
- Foddy, William H. 1993. Constructing questions for interviews and questionnaires : theory and practice in social research. Cambridge, UK ; New York, NY: Cambridge University Press.
- Heal, G. M. 1998. Valuing ecosystem services. New York: Columbia Business School Columbia University.
- Kempton, Willett, James S. Boster, and Jennifer A. Hartley. 1995. Environmental values in American culture. Cambridge, Mass.: MIT Press.
- Morgan, David L. 1997. Focus groups as qualitative research. 2nd ed. Thousand Oaks, Calif.: Sage Publications.
- Morse, J. 1998. What's wrong with random selection? *Qualitative Health Research* 8:733-735.
- National Research Council. 2002. Community and quality of life : data needs for informed decision making. Washington, D.C.: Board on Earth Sciences and Resources Division on Earth and Life Studies National Research Council National Academy Press.
- Raish, Carol, and Alice M. McSweeney. 2003. Economic, social, and cultural aspects of livestock ranching on Española and Canjilon Ranger Districts of the Santa Fe and Carson National Forests : a pilot study, General technical report RMRS ; GTR-113. Fort Collins, CO: U.S. Dept. of Agriculture Forest Service Rocky Mountain Research Station.
- Russell, John, and Peggy Adams-Russell. 2006. Values, Attitudes, and Beliefs, about National Forest System Lands: Coconino National Forest Flagstaff, AZ: Coconino National Forest.
- Russell, John C., and Peggy A. Adams-Russell. 2005. Nanuq: Cultural Significance and Traditional Knowledge Among Alaska Natives. Nome, Alaska: Alaska Nanuq Commission.
- Sanjek, Roger. 1990. Fieldnotes : the makings of anthropology. Ithaca: Cornell University Press.
- Spradley, James P. 1979. The ethnographic interview. New York: Holt Rinehart and Winston.
- Strauss, Anselm L. 1987. Qualitative analysis for social scientists. Cambridge Cambridgeshire ; New York: Cambridge University Press.

## References

Strauss, Anselm L., and Juliet M. Corbin. 1998. *Basics of qualitative research : techniques and procedures for developing grounded theory*. 2nd ed. Thousand Oaks: Sage Publications.

# Appendix

## Topic Areas for Discussion

Please describe where you live and your interest in national forest lands.

### Community Character and Recent Changes

How has this community changed in the last 10-15 years? What are the sources of community change?

Have these changes had any consequences for forest lands?

What communities, occupations, or lifestyles are most and least affected by how this national forest is managed?

### Uses

Describe your use or the uses of family members of Forest lands. (Please indicate use areas on the national forest map.)

Are there types of uses of forest lands that you feel need to be enhanced or better managed by the Forest Service? (Please indicate on the map)

Are there areas where some types of uses are in conflict? (Please indicate on the map)

Is there anything the Forest Service should do to change how Forests are used in the future?

### Resources

What are the special qualities and characteristics of this national forest?

For example, wildlife, vegetation, vistas, climate, historical structures or sties, timber, grazing, trails, quiet places, etc...

Locate on the map the forest resources that are important to you.

What changes would you like to see in the management of forest resources?

### Favorite Places

Do you have a picture or a story about a favorite place on this forest? Can you describe what makes it a favorite place for you?

What are your thoughts about the benefits of Wilderness, Roadless, and similar areas for this national forest?

Do you believe there is a need for additional designations for lands or resources within this national forest?

### National Forest Benefits and Values

What do you value about this national forest? (e.g., Products, Services, Opportunities, Existence)

What are the benefits to nearby communities and groups from this national forest?

**Desired Futures**

How would you compare the conditions in the forest now to how you would like to see them in the future?

What should the Forest Service do to achieve your future vision for these lands?

**Key Management Issues and Priorities for Future Forest Management**

What do you think is broken and what needs to be fixed in management of this national forest?

What has the USFS done well in its management of lands and resources here?

Are there any additional issues would like the forest to consider or address in future management?