



United States  
Department of  
Agriculture

Forest  
Service

Southwestern  
Region

September 2006



# **Values, Attitudes and Beliefs Toward National Forest System Lands: The Coconino National Forest**



# **Values, Attitudes and Beliefs Toward National Forest System Lands: The Coconino National Forest**

**Prepared for:**

**The Coconino National Forest  
824 S. Thompson St.  
Flagstaff, AZ 86001**

**and**

**USDA Forest Service  
Southwestern Region  
333 Broadway SE  
Albuquerque, New Mexico 87102**

**Submitted by:**

**John C. Russell, Ph.D.  
Peggy A. Adams-Russell  
Adams-Russell Consulting  
1688 Springvale Road  
Placerville, CA 95667**



# Contents

<b>Acknowledgements .....</b>	<b>iii</b>
<b>Executive Summary .....</b>	<b>1</b>
<b>Background .....</b>	<b>5</b>
Data Collection and Processing .....	5
Coconino National Forest .....	7
The Socioeconomic Context .....	10
<b>Results.....</b>	<b>17</b>
The Planning Environment .....	17
The Social Environment .....	18
Population Growth.....	18
Changing Cultural Values .....	20
Forest Conditions and Characteristics .....	21
Amenity and Aesthetic Value.....	21
Access and Proximity .....	22
At-Risk Resources .....	22
Identity Issues.....	23
Now and Then .....	23
Pressure .....	24
Agency Presence and Procedures .....	24
Sidebars .....	25
Institutional Issues .....	26
Coconino National Forest Management .....	27
Multiple-Use Beliefs and Values.....	33
Multiple-Use Issues .....	33
Commercial Uses.....	34
Recreation Uses.....	35
Enforcement and Education Needs .....	40
Permits and Fees: “You can’t see the forest for the fees.” .....	41
Resource Benefits and Values .....	44
Economic Benefits.....	44
Social Benefits: Rural Places and Respite Needs.....	44
Place Values and Special Resources .....	45
Controversial Resources: Timber, Grazing, Owls, and Wilderness .....	47
<b>Management Priorities and Desired Futures: Agency and Public Perspectives .....</b>	<b>49</b>
Agency Perspectives .....	49
Public Perspectives .....	50
Public Interface.....	51
Accountability .....	51
Attitude.....	51
Collaboration .....	52
Education and Enforcement .....	53
Greater Good .....	53
Permits.....	54
Stewardship .....	54
Resource Use and Management .....	55
Aesthetic and Amenity Resources .....	55
Ecosystem Benefits and Resource Conservation.....	55

Contents

Fire and Forest Health ..... 55  
Grazing ..... 57  
Land Exchanges..... 57  
Off-Highway Vehicle Travel Plan..... 59  
Special Resources and Places ..... 59  
Timber Management ..... 60  
Trails and Recreation Resources ..... 61  
Wildlife, Species Conservation, and Habitat Fragmentation..... 61  
Gaps in Agency and Public Priorities ..... 61  
**References ..... 63**  
**Appendix. Topic Areas for Discussion ..... 65**

**List of Tables**

Table 1: Region 3 Forests Ranked by Total Area ..... 8  
Table 2: County Land Ownership ..... 11  
Table 3: Coconino National Forest ..... 13  
Table 4: Coconino NF Study Area Incorporated Places Population 2000 & 2004 ..... 13

**List of Figures**

Figure 1: Coconino National Forest Counties..... **Error! Bookmark not defined.**  
Figure 2: Coconino NF County Land Ownership..... **Error! Bookmark not defined.**  
Figure 3: Percentage of Project Area Population by County ..... 15

# Acknowledgements

Katherine Farr and District Rangers of the Coconino National Forest assisted in the identification of participants and provided their valuable time to discuss current issues in management of the Coconino National Forest. In the Regional Office, Reuben Weisz, and Richard Permian have always been available to discuss ideas and provide direction and support for this work. The participants in this work deserve special thanks for volunteering their time and offering their thoughts and feelings about the future of the Coconino National Forest. The willingness of project participants to contribute to this process is a reminder of the essence of our democracy.



# Executive Summary

This report summarizes findings about values, beliefs, and attitudes regarding management of the Coconino National Forest (NF) that occupies about 1.86 million acres in northern Arizona. The majority of the CNF is located within Coconino County, although portions also lie within eastern Yavapai County and northern Gila County.

This project used discussion groups and interview methods to identify participant assessments of issues, concerns, beliefs, and values regarding issues for forest plan revision. These types of issues are connected with the larger northern Arizona socioeconomic context. This context influences the types of issues identified as important, the possible solutions to perceived problems, as well as how publics choose to participate or not in planning activities. Scholars at the University of Arizona have compiled a comprehensive socioeconomic profile and analysis for national forests in Arizona including the Coconino National Forest (Arizona National Forests Socioeconomic Assessment Team 2005). The University of Arizona study should be consulted for a description of socioeconomic conditions and trends linked to national forest management.

Discussion groups and interviews for this project were conducted in Blue Ridge, Cottonwood, Flagstaff, and Sedona. An open-ended interview methodology was implemented using a discussion guide (see appendix) to raise topics concerning potential issues for forest plan revision. Responses were coded using traditional qualitative analysis methods and then organized by major themes for presentation in this report. Four categories of information are presented:

- The planning environment affecting revision of the existing forest plan, including the social environment, forest conditions and characteristics, and agency presence and procedures.
- Multiple-use values and beliefs.
- Resource benefits and values.
- Agency and public priorities for forest plan revision.

## **Planning Environment**

There is a “planning environment” that affects the identification of resources and use issues, assessments of management problems, and perceived solutions to those problems. The planning environment for the Coconino National Forest is affected by the northern Arizona social environment; forest characteristics and conditions; and, agency presence and procedures. In the social environment, population growth and changes in composition are affecting: resource use, assessments of resource damage; desires for resource protection; and, desires for additional resources to respond to increased demand. Similarly, changes in values, associated with population changes, are perceived to affect patterns of use, damage to resources, and the future of public stewardship for forest resources. The planning environment is also affected by participant assessments of forest characteristics and conditions, particularly values and beliefs about the place characteristics of the Coconino NF. These characteristics and conditions affect how participants define problems to solve in forest management. These place assessments describe amenity and aesthetic values, access and proximity, a perceived gradual deterioration of forest health and resources, and increased use-pressure as key concepts about existing conditions. Agency presence and procedures identify “institutional” issues such as rotation of personnel, the complexity of bureaucratic processes, limitations on resources and personnel, and confusion about agency mission as among the key issues affecting the planning environment. CNF specific issues concern the desire for improved communication with stakeholders, a desire for more

partnerships with communities, improved public involvement processes, management consistency, and streamlined processes for working with communities to achieve mutual goals.

### **Multiple-Use Values and Beliefs**

The concept of multiple-use continues to organize much of public thinking about the use of forest lands and resources. Diverse perspectives support the idea of multiple-use, but there is a desire for a return to “balance” and “the greater good” in decision making about resource use. Participants also desire a renewed emphasis on public and agency partnerships to foster stewardship to address the consequences of increased use.

Participants identified the Coconino NF as a “recreational forest” with limited commercial use, primarily timber harvesting, grazing, and commercial tourism. Recreational issues identified by participants focus on the effects of increased use by a growing and diverse public. Priority recreation issues include: trail maintenance; expansion of trail resources; accommodation of OHV uses that do not damage resources or disrupt other users; enforcement and education to address problem behavior associated with increased use; and streamlining of permitting to increase the accessibility of forest resources. Participants also expressed a range of views about fees for use of forest resources: fees are a necessary evil, fees are a viable means to ensure maintenance of heavily used resources; fees are double taxation; and, fees can deter legitimate users from visiting forest lands.

### **Resources Values and Benefits**

Participant assessment of forest resources include the importance of wildlife, scenery, the economic opportunities offered by renewable resources, landscape diversity, and historical and archaeological resources. Several other themes are in the data about the benefits and values of forest resources.

- Forest resources have economic benefits to adjacent communities by providing opportunities for commercial tourism and other limited commercial use.
- There are social benefits that result from forest lands enabling a valued rural lifestyle in a wildland setting.
- Forest resources also provide social value by offering respite resources (stress relief and renewal) for residents of both urban and rural communities.
- Forest lands also contain special places that include wilderness, roadless areas, and other non-designated places that enhance the quality of life in adjacent communities.
- Some resources appear to evoke controversy, especially timber, grazing, and other resources used commercially. Controversy appears to be created by issues about: who benefits from resource use; any commercial use of a public resource; identification as a protected resource; and, intensity of resource use. These components of controversy offer some insight about how to seek out common ground in future collaboration with stakeholders about controversial resource issues.

### **Management Priorities and Desired Futures**

Agency and public priorities are compared for any gaps or inconsistencies for consideration in Forest Plan revision. Public priorities include issues about the character and quality of agency relationships with stakeholders and interested publics as well as resource and use issues

concerning: aesthetic and amenity resources; ecosystem benefits and resource conservation; fire and forest health; grazing management; land exchanges; OHV use and travel plans; management of special places and resources; timber management; trail management and improvement; addressing increased recreation demand; and species conservation and wildlife habitat. Agency and public priorities overlap on most resource issues, but public priorities also emphasize public interface issues such as: accountability; a more welcoming attitude to users; collaborative working relationships; desires for education and enforcement; and emphasis on stewardship and managing for “balance” and the “greater good”; and, a less onerous permitting process.



# 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 Coconino 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 or 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. The University Of Arizona School Of Natural Resources has prepared a comprehensive socioeconomic assessment for the Coconino National Forest as well as other national forests in Arizona (Arizona National Forests Socioeconomic Assessment Team 2005). Additionally, the Rocky Mountain Research Station is preparing to administer a survey of 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 data to compare with similar state and regional information.

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 these perceptions and assessments express 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 administered in 2006. 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 Coconino National Forest.

## Data Collection and Processing

Identification of values, attitudes, and beliefs was achieved by the use of a discussion group or focus group approach (Morgan 1997). Additionally, some individual interviews were conducted with persons who were unable to attend the discussion group sessions. Participants were selected for these groups by consultation with District Rangers, forest planning staff, and other individuals within the Coconino National Forest. The goal was to select participants to identify 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 groups “representative” of their communities. Targeted sampling is intended to include individuals knowledgeable about forest and community issues as a means to identify key issues of concern to persons who use or who are otherwise knowledgeable about forest issues. In the targeted sampling approach used for this work, the knowledge of District Rangers, the Forest Planner, and other staff of the Coconino was essential for selecting discussion group participants with diverse perspectives about forest management issues. The authors reviewed the list of potential participants with the Forest Planner.

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 for other topics. The social environment discussions were oriented to 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 patterns of use and resource conditions. Desired futures and issues for Plan revision directly address topics participants wish to see addressed by 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.

The open-ended interview approach is consistent with qualitative interview techniques that begin with the most general types of issues and then focus the discussion 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 had such a base of information based on similar work conducted for other national forests in Region 3, including the Coronado, Kaibab, Gila, Carson, and Cibola National Forests as well as three national grasslands (e.g., Russell 2005; Russell and Adams-Russell 2005, 2005, 2005, 2006). Based on responses to the open-ended questions, follow-up questions probe how participants construct their responses to the open-ended questions. This technique is intended to develop participant definitions, views, and categories about a topic.

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 (cf., Sanjek 1990; Emerson, Fretz, and Shaw 1995) for non-recorded sessions. Sketch notes were annotated with the time mark in the recordings by topic area. This material was 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 specific issues were grouped within these categories. Representative statements were then identified to illustrate specific points where the issue could benefit from a statement by participants in their own words.

Presenting 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. One strategy is to present a detailed discussion of a few key topics. Another strategy is to present the range of issues discussed, but limit the detail. This presentation uses the latter strategy since participants identified a wide range of topics and diverse views about particular issues. The authors recognize this strategy abbreviates and under-develops complex issues. In choosing to present range rather than depth, the authors assume these findings are a starting point for future refinement and development of these issues by dialogue between the Coconino National Forest, stakeholders, and other interested publics.

Four discussion groups were organized in different geographic locations:

- A Sedona group was held during a daytime session at a community facility. This group was attended by nine persons representing commercial users, environmental interests,

- birding interests, local government, long-term residents, community boosters, and newly arrived residents. This group had a duration of about two-and-one-half hours.
- Cottonwood was the site for another group representing eastern Yavapai County and environs. Six persons attended this group representing local government, general recreation interests, commercial users, and mountain biking enthusiasts. This group was held during the day at a Cottonwood community facility and had a duration of about three hours.
  - A local government facility in Flagstaff was the site for another meeting attended by eleven persons from the greater Flagstaff area. Logging, recreation, local government, other federal land management agencies, ranching, environmental, off-road vehicle users, and local business interests were present for this group. This discussion session had a duration of about two-and-one-half hours.
  - Blue Ridge in eastern Coconino County was the site for the fourth discussion group session. This meeting was held at a community center near Blue Ridge. Seven persons attended this session representing new and longer term residents, off-road vehicle interests, ranching interests, local businesses, and the local fire department. This session consumed about two hours.

Five additional persons participated in individual interviews that included local government, off-road vehicle interests, and environmental and conservation interests. These individuals were unable to attend the discussion group sessions or they requested an in-person interview. These interviews were based on the discussion guide and had duration of from about one to one-and-a-half hours.

## Coconino National Forest

The Coconino National Forest (CNF) occupies about 1.86 million acres in northern Arizona. It is the third largest of the six national forests in Arizona and for gross acreage it is the fifth largest forest in the Southwest Region (Region 3). The majority of the Coconino NF is located within Coconino County, although portions also lie within eastern Yavapai County and northern Gila County. There are four Ranger Districts:

- Peaks Ranger District located in Flagstaff
- Mormon Lake Ranger District located in Flagstaff
- Mogollon Rim Ranger District located in Blue Ridge
- Red Rock Ranger District located in Sedona

Within these four districts, there are a variety of natural and archaeological resources. These include natural features such as the Red Rocks of Sedona, the Mogollon Rim, the San Francisco Peaks, as well as high mountain vistas and desert sunsets. There are ten wilderness areas as well as Wild and Scenic Rivers and diverse wildlife, including deer, elk, black bear, javelina, and mountain and desert predators such as coyote and mountain lion. Historically, logging, cattle grazing, and some mining have been among the prominent uses of forest lands, although since the last Forest Plan commercial uses of forest lands have generally decreased and recreational uses have increased. The association of the Coconino NF with adjacent communities has also changed along with population growth, economic diversification, and changes in American beliefs and values about natural resources (Kempton, Boster, and Hartley 1995).

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

<b>Southwestern Region (3)</b>	<b>Rank by Size</b>	<b>Gross Acreage</b>	<b>NFS Acreage</b>	<b>Other Acreage</b>
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
<b>Coconino NF</b>	<b>5</b>	<b>2,013,960</b>	<b>1,855,679</b>	<b>158,281</b>
Coronado NF	6	1,859,807	1,786,587	73,220
Santa Fe NF	7	1,734,800	1,572,301	162,499
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)

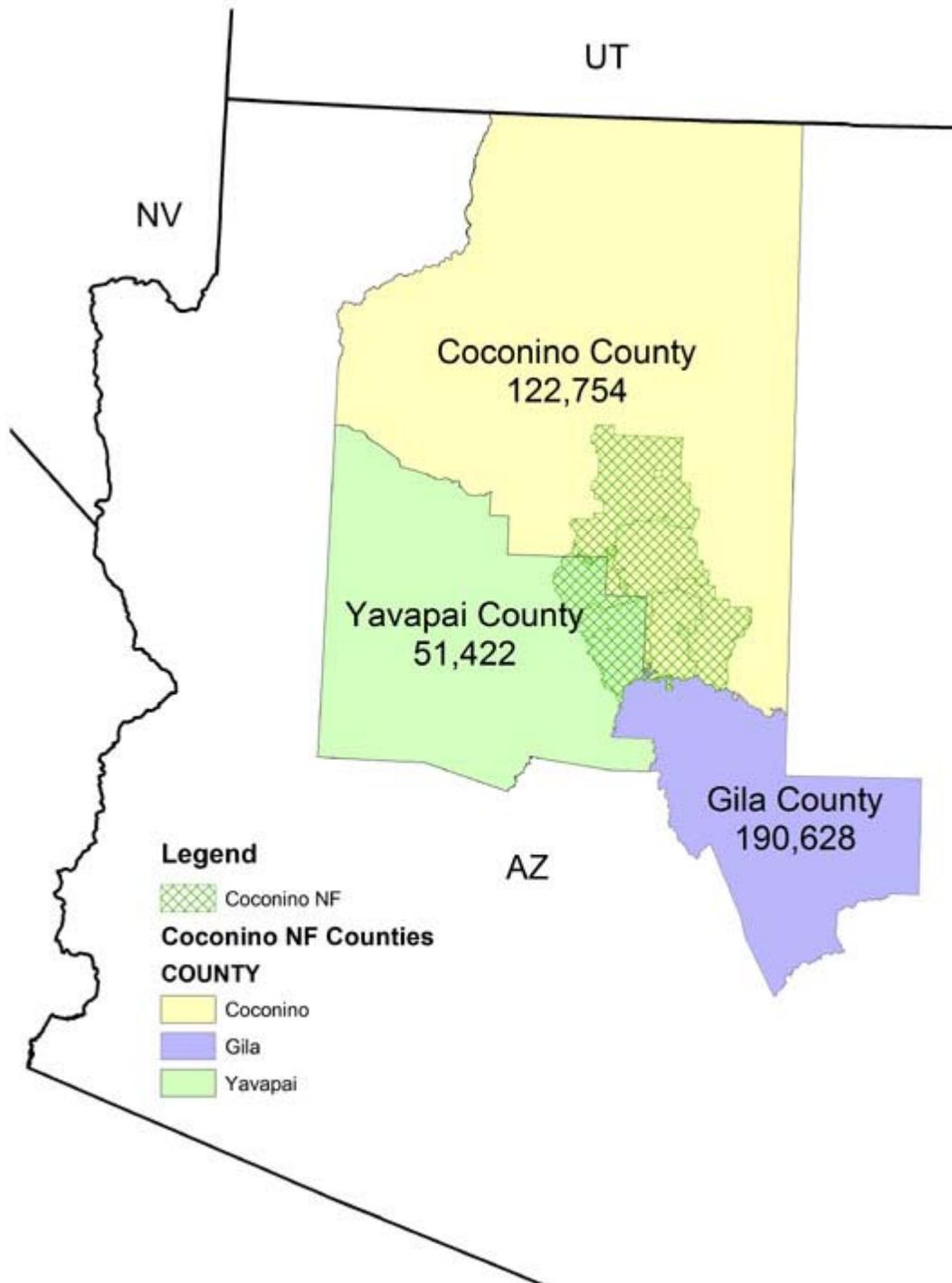


Figure 1. Coconino National Forest Counties

## The Socioeconomic Context

The socioeconomic context of a forest can be thought of as concentric circles of influence and interaction among social, cultural, and economic environments affecting forest management and use. There can be national, regional, local, or other scales of socioeconomic context interacting with a particular forest. Usually, social assessments and other social analyses focus on the social environment in the immediate environs of a particular forest. This context is useful because it identifies potential connections between use and management issues and an adjacent social environment around forest boundaries. For example, a loss of jobs in nearby communities can create demand for increased commercial use of forest lands or changes in population composition may signal a shift in values about forest management priorities. Values and beliefs within a socioeconomic context also can predict what is perceived to be a meaningful problem and assessments of appropriate solutions to these problems. These public assessments may signal differences in how publics and the Forest Service evaluate issues.

The socioeconomic context has ongoing relevance for forest management and planning, but it also is particularly relevant for revision of the existing plan because it partially structures what can be termed the “planning environment.” This is a straightforward idea: planning takes place in relationship to political, ecological, social, organizational, and other factors. These can influence who participates, what issues are raised as important, and how publics choose to participate or not in planning activities. Consequently, identifying socioeconomic components of the planning environment is useful to help structure the planning process. The relationship of socioeconomic information to the planning environment is discussed in more detail in the presentation of results.

Scholars at the University of Arizona have compiled a comprehensive socioeconomic profile and analysis for national forests in Arizona including the Coconino National Forest (Arizona National Forests Socioeconomic Assessment Team 2005). This document should be consulted for a description of socioeconomic conditions and trends linked to national forest management. This discussion of socioeconomic issues is a brief overview of some important context information for presentation of the results about beliefs, values, and issues of concern to publics about the management of the Coconino NF. Noteworthy points about this socioeconomic context include:

- Land ownership patterns in Coconino and adjacent counties indicate limited lands for private development; and, Forest Service managed lands and tribal lands have the highest percentage of ownership. This suggests the likelihood of a high level of public concern about the management of lands within this region because of the ratio of private to public and other lands.
- Yavapai County has about 52 percent of the project area population, Coconino County about 34 percent, and Gila County about 14 percent. The three counties show different trends in growth. Yavapai County has a higher growth rate than the state and it is more than twice the growth rate of the other two counties. Communities in Yavapai County have a higher growth rate than communities in the other 2 counties: 6 of the 10 census identified places in Yavapai County have double digit growth rates whereas no communities in Gila or Coconino counties have double digit growth rates for the 2000-2004 time period.
- The presence of a large university in Flagstaff appears to contribute to Coconino County having a different population composition than Yavapai and Gila counties. Coconino County has higher numbers of persons under 18, fewer persons over 65, and a lower

median age. Coconino County also has more ethnic diversity than the other counties. Native Americans account for the highest percentage of this diversity.

- Based on 1999 data, all three counties have lower than the state median for household income and per capita money income. Among the three counties, Coconino has the highest median household income and Gila County the lowest. Yavapai County has the highest per capita money income and Gila County is again the lowest. Coconino and Gila counties have higher than the state average for persons in poverty than the state average.

Economic and other population and housing data are thoroughly discussed in the University of Arizona report for these three counties. The information about the socioeconomic context and linkages with forest resources and uses is a noteworthy point of comparison for findings presented in this document. Additionally, issues and concerns of tribal groups in northern Arizona are addressed in a separate document based on discussion sessions held with Hopi, Navajo, and Apache participants.

**Table 2: County Land Ownership**

<b>County</b>	<b>BLM</b>	<b>USFS</b>	<b>State</b>	<b>Private</b>	<b>Indian</b>	<b>Other Public Lands</b>	<b>Total Area</b>
Coconino	612	3,269	1,137	688	5,447	762	11,915
Gila	65	1,705	31	71	1,159	20	3,051
Yavapai	567	1,969	1,264	1,327	8	64	5,199
<b>Total</b>	<b>14,236</b>	<b>11,255</b>	<b>9,312</b>	<b>12,703</b>	<b>20,212</b>	<b>5,007</b>	<b>72,725</b>

Source: USDA 2004 Arizona Agricultural Statistics Bulletin

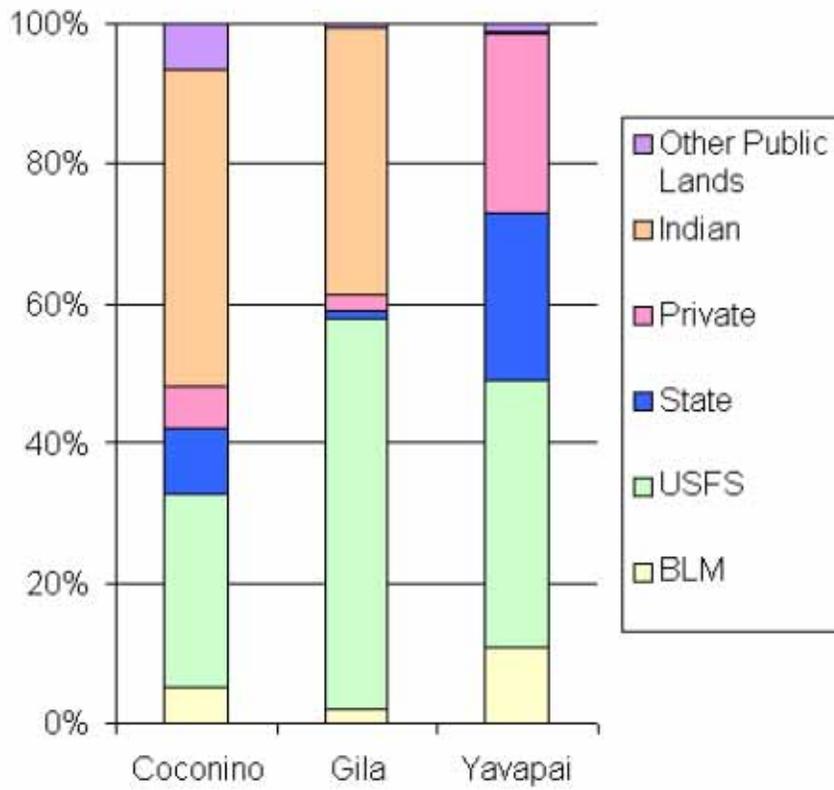


Figure 2. Coconino NF County Land Ownership

**Table 3: Coconino National Forest**

People QuickFacts	Coconino NF			
	Arizona	Coconino County, AZ	Gila County, AZ	Yavapai County, AZ
Population, 2003 estimate	5,580,811	121,301	51,448	184,433
Population, percent change, April 1, 2000 to July 1, 2003	8.8%	4.3%	0.2%	10.1%
Population, 2000	5,130,632	116,320	51,335	167,517
Population, percent change, 1990 to 2000	40.0%	20.4%	27.6%	55.5%
Persons under 18 years old, percent, 2000	26.6%	28.7%	25.1%	21.1%
Persons 65 years old and over, percent, 2000	13.0%	7.0%	19.8%	22.0%
Median Age	34.2	29.6	42.3	44.5
White persons, percent, 2000	75.5%	63.1%	77.8%	91.9%
Black or African American persons, percent, 2000	3.1%	1.0%	0.4%	0.4%
American Indian and Alaska Native persons, percent, 2000	5.0%	28.5%	12.9%	1.6%
White persons, not of Hispanic/Latino origin, percent, 2000	63.8%	57.6%	68.9%	86.6%
Persons of Hispanic or Latino origin, percent, 2000	25.3%	10.9%	16.6%	9.8%
Language other than English spoken at home, pct age 5+, 2000	25.9%	28.2%	18.2%	9.7%
Median household income, 1999	\$40,558	\$38,256	\$30,917	\$34,901
Per capita money income, 1999	\$20,275	\$17,139	\$16,315	\$19,727
Persons below poverty, percent, 1999	13.9%	18.2%	17.4%	11.9%
Land area, 2000 (square miles)	113,635	18,617	4,768	8,123
Persons per square mile, 2000	45.2	6.2	10.8	20.6
<b>Agriculture</b>				
Number of Farms 1997 to 2002 % Change	-14.3%	-25.5%	-27.4%	-12.1%
Land in farms (acres, 1997 to 2002) % Change	-2.1%	(D)	(D)	-9.7%
Average size of farm (acres, 1997 to 2002) % Change	14.1%	(D)	(D)	2.7%

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

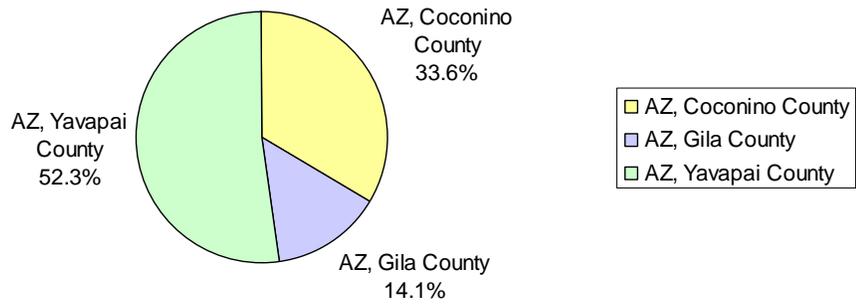
**Table 4: Coconino NF Study Area Incorporated Places Population  
2000 & 2004**

<b>Coconino NF</b>	<b>2000</b>	<b>2004</b>	<b>% Change</b>
Arizona	5,130,632	5,743,834	12.0%
<b>AZ, Coconino County</b>	<b>116,320</b>	<b>122,754</b>	<b>5.5%</b>
Flagstaff	52,894	57,038	7.8%
Fredonia	1,036	1,046	1.0%
Leupp, Navajo Nation *	970	1,023	5.5%
Page	6,809	6,818	0.1%
Sedona (Coconino & Yavapai)	10,192	11,067	8.6%
Tuba City, Navajo Nation *	8,225	8,677	5.5%
Williams	2,842	2,969	4.5%
<b>AZ, Gila County</b>	<b>51,335</b>	<b>51,422</b>	<b>0.2%</b>
Globe	7,486	7,204	-3.8%
Hayden	892	848	-4.9%
Miami	1,936	1,851	-4.4%
Payson	13,620	14,473	6.3%
San Carlos, Apache Reservation *	9,385	9,404	0.2%
Winkelman	443	443	0.0%
<b>AZ, Yavapai County</b>	<b>167,517</b>	<b>190,628</b>	<b>13.8%</b>
Bagdad *	1,578	1,796	13.8%
Camp Verde	9,451	10,033	6.2%
Chino Valley	7,835	9,160	16.9%
Clarkdale	3,422	3,700	8.1%
Cottonwood	9,179	10,424	13.6%
Jerome	329	340	3.3%
Prescott	33,938	38,930	14.7%
Prescott Valley	23,535	30,231	28.5%
Sedona (Coconino & Yavapai)	10,192	11,067	8.6%
Verde Village * & **	10,610	12,074	13.8%

Source: U.S. Census Bureau, Census 2000 and Population Estimates Program 2004

\* = 2004 figures based on county growth rate

\*\* = Verde Village figures reflect Cottonwood-Verde Village CDP (Census Designated Places)



**Figure 3. Percentage of Project Area Population by County**



# Results

Discussion groups and individual interviews yielded information about topics ranging from perceived needs for shooting ranges and opening or closure of specific roads to expectations about the desired conditions for forest resources<sup>1</sup>. While it may be desirable to present the full range of information participants volunteered, this would encumber presentation of strategic beliefs, values, and attitudes about the Coconino NF. The specifics and details from all discussion groups were thus aggregated to identify prominent themes in the topics discussed. For example, discussions about erosion on a particular trail in one district and downed trees across trails in another district were collated with other trail topics to identify a more generalized belief about “trail conditions and the need for maintenance.” The aggregation of specific details resulted in three major topic categories.

- The “planning environment” is structured by public understandings and assessments of the Forest Service, existing forest conditions, and characteristics of the social environment. Development of a forest plan occurs within this context or “planning environment.”
- Multiple-Use. This topic addresses broad assessments of forest uses and beliefs and values about desires for change in existing patterns of use.
- Resource Benefits and Values. Participants identified a range of specific resource issues that were aggregated by topic area to present information about the natural and other resources of the Coconino National Forest.

These three categories each contain “themes” or generalizations based on the specifics participants presented.

## The Planning Environment

Participants in discussion groups and interviews have forest planning on their minds. Some of this awareness can be attributed to perceptions of the Coconino National Forest as having a significant influence on the nature and quality of the social environment of adjacent communities:

*We are ninety percent state and federal lands here. The value of the forest is ... well it is what makes us what we are. It has quality of life value for us and it has tourism value with economic benefit for us. And, those values are going to grow.*

There is anticipation that upcoming planning activities may be an opportunity to address issues of concern for stakeholders and other interested parties. As participants in Sedona discussions observed:

*The Forest Plan is going to be a big deal and it needs to be a big deal. The Forest Service is such a big land owner, it is important. All the local community plans that have been done in the past*

---

<sup>1</sup> Information volunteered by participants suggests some distinct and variable frameworks or “deep structure” about the human-nature relationship (Soul e and Lease 1995; Ellen and Fukui 1996). These frameworks are composed of propositions that are used to identify important issues, explain the effects of perceived problems, and to structure expected and appropriate solutions to perceived problems. These frameworks can be termed “explanatory models” that are used to interpret the natural world and our relationships with it (cf., Strauss and Quinn 1997; Schank and Abelson 1977). These frameworks or explanatory models are not directly addressed in this analysis<sup>1</sup>, although they appear to structure some assessment of important issues, the effects of particular management approaches, and the desirability of particular courses of future action.

## Results

*few years have had lots of public participation and created lots of interest. This is a bigger deal than those community plans. There needs to be a great big effort to get the public involved. We want to make sure there is enough involvement so they know what the community thinks.*

Participants in other discussions appear frustrated with what is perceived to be an imbalance in influence of publics on the management of forest resources:

*There are too many experts who have lost sight of common sense. These experts are contributing to the problem because they are not looking for solutions. There are those groups and experts out there who are not willing to compromise. Every single timber sale they will fight, regardless. There has to be a way to address this attitude that 'it is our way or no way or we will go to court to fight this.' Is the real solution litigation? ... There is an environment of radicalism around forest management and now litigation is the outcome of almost any decision they (Forest Service) make. We need to do something different.*

These are different responses to the planning process. Such responses to and participation in planning activities are influenced by attitudes, beliefs, values, and other social and cultural variables. Different configurations of these variables will influence issues such as who participates, the topics of concern, and public responses to planning activities and products.

The socioeconomic context influencing a particular planning environment is structured by a configuration of socioeconomic and cultural variables in addition to other organizational and ecological variables. This work identified three significant categories of information about the socioeconomic and cultural influences on the planning environment: (1) particular characteristics of the social environment, especially observations about population change and assessments of changing values; (2) judgments about forest characteristics and conditions; and (3) evaluations of the Forest Service presence and procedures in managing the Coconino National Forest. Prominent themes within these categories are summarized and illustrated in the following sections.

### **The Social Environment**

Diversity characterizes both the forest and social environment of the Coconino National Forest. The social environment ranges from small rural mountain communities to the urban areas of Flagstaff and tourist destinations such as Sedona. Phoenix and other urban communities are also a source of second home owners who are seasonal residents. Forest lands range from the highest snow capped peaks in Arizona to the verdant valleys in the southern portions of the forest. Participants expressed particular views about the existing social environment and characterizations of forest lands and resources that structure the planning environment for revision of the existing forest plan. There are two prominent themes about the changes in the social environment and their influences on forest use and resources: (1) overall population growth and (2) changes in values, some of which are related to population growth and composition.

### **Population Growth**

Most participants perceive population change as among the most significant factors in this social environment. Among the prominent themes are the following:

- Population growth has increased demand for the use of forest lands and resources. There is also a perception that this growth is inevitable because of the lifestyle benefits offered by the natural resources of forest lands and resources:

*We are never going to be able to keep people away from this area because of the resources we have here. So, that is why management is so important, so darn important.*

- Population growth has resulted in demand for development which sometimes affects the interface of urban areas with forest lands.

*There is a lot of development in unincorporated regions: someone buys a lot, splits it up and the houses are developed. They call these “wildcat subdivisions” what was once 140 acres undeveloped becomes 70 home sites, forty of them probably adjacent to the forest. It creates lots of access points into the forest. It is primarily ranch land that is being sold and subdivided.*

- Population growth is affecting the interface of communities with forest lands.

*The growth in the area is impinging on forest lands: the community is growing out and into forest lands. The population density is resulting in impact on forest lands.*

- Phoenix area growth is affecting local communities because some of those residents are migrating to northern Arizona; and, Phoenix area residents use the environs of the Coconino NF for recreation.

*People in Phoenix look at Flagstaff like the people in Texas look at Colorado: it is their playground. Right, wrong, or indifferent, it is a fact of life that there are a lot more demands on the forest than ever before. Whether you are a horseman, a bicyclist, a birder, a hiker, a camper, or whatever, the demands on the forest are more varied and there is much greater impact from it.*

- Population diversity is more apparent in urban areas, although ethic of visitors from Phoenix and environs contribute to the perceived diversity of users of forest resources.
- Communities adjacent to forest lands show distinct differences, varying from urban Flagstaff, rural Blue Ridge, tourist oriented Sedona, and the growing environs of Verde Valley. Most of these communities perceive they are “surrounded” by forest lands. The ratio of public to private lands appears to increase attention to public lands management issues and to the needs for cooperation and partnerships between the Coconino NF and adjacent communities:

*Housing and overall population density is increasing in the urban areas because there is limited private land. As this growth continues, there is going to be a need for water and waste water treatment. ... This means the Forest Service will have to work closer with local governments to supply those resources. The forest adds to the desirability of our community and because we have so little private land, there are new pressures on water supply and waste water treatment. The Forest Service should help out there because we cannot create any new land here.*

- Blue Ridge communities are distinguished by higher proportions of seasonal residents who summer in the mountains and winter in the valley. Permanent residents are increasing in the mountain communities. With increased use and residence, some participants fear the rural character of these communities is being compromised:

*We are on our way to becoming another Show Low. There is too much subdivision and too much restriction of use because of development.*

- “Churning” or population turnover is described as a characteristic of both the Sedona and Blue Ridge areas. This “churning” is attributed to those who move to rural areas and find the reality of rural lifestyles is not consistent with their expectations or needs and these individuals and families then move on and are replaced by new residents.
- The timber industry has diminished in size and infrastructure while tourism and recreational uses of forest lands are perceived to have increased exponentially. The amenity and lifestyle benefits of forest lands are now among the important assets of the social environment that are affecting population change.

*A lot of people moving to this area are moving here because of public lands. It is not flat and people like that. At a federal level, they have missed that things have changed from extractive uses to recreation. There has not been a shift in money to recreation. Before, timber more or less took care of themselves and now we have fee demo. I don't agree with it, but it is an attempt to address this financial concern. There just isn't money to fund this explosion of recreational use created by population changes.*

### Changing Cultural Values

Participants also describe changes in values as an important characteristic of the social environment. Some of these changes are associated with overall population growth, while others are attributed to generational differences or the values of new migrants to the area.

- There is a strong theme concerning changes in the ethics and values about responsibility to care for forest resource. These changes are described as both generational and associated with individuals who may have migrated from urban areas.

*Maybe it is generational, maybe it is cultural, but there is less of a sense of 'this is our forest and we need to take care of it.' The people that come up here from Phoenix, the people that move here from California and elsewhere, there just does not seem to be the soul in those people about caring for this forest the way those of us that have lived here all of our lives have.*

*That is not to say that everyone that comes here is going to rape and pillage, but especially the weekenders who come here from Phoenix don't respect forest health, fences, private property. ... There is just a general lack of conscience.*

Those “without a soul for the land” are contrasted with those who have a longer term relationship with natural resources, especially those who “work the land.”

*People that work the land have a real feel for what is going on and they care for the land. They are there to protect it because it is a big asset to them in addition to their moral commitment. But, people coming here for the weekend have no more connection to the land than the man in the moon.... Just the trash from the sledding is awful. Every Spring I go out there and fill up my truck with trash from the weekenders. I can't call the Forest Service and ask them to pick up that trash. I do it because it needs to be done.*

- Population change is also perceived to result in an increased potential for problem behavior associated with poor land ethics:

*There is a whole generation of baby boomers retiring to the Southwest and to our area. The water projects here have provided a place for people to go. Seventy-five years ago*

*there was no water in Phoenix and now there is and so people are moving here. Just the sheer numbers moving here are causing problems. If there are ten people in a crowd, then one of them is going to be an idiot and tear up a trail. So, fifty years ago there were a few people going to the forest and now there are hundreds of thousands and there are a crowd of idiots rather than just a few.*

- There are also values and attitudes perceived to be associated with new generations and new migrants to the area that are evaluated as problematic:

*People want to move here, but they want to bring all the accoutrements of the city with them. They will not clear around their houses to protect themselves and they want someone to take care of them and not be responsible for their property.*

And,

*There is an attitude: 'because I pay taxes I can go out on public lands and do what I want to without concern about the consequences. I pay taxes so someone has the responsibility.' The USFS needs to tackle this issue head on. There are effects from this and they need to be addressed by fees, contracting/privatization, volunteers, and setting an example of someone.*

## **Forest Conditions and Characteristics**

A second component of the planning environment is participant assessments of forest conditions and characteristics. Assessments of the Coconino NF as a “place” and the characteristics and conditions of that place affect how participants define problems to solve in forest management. For example, one non-Indian participant observed:

*The name 'Coconino' is derived from a Hopi word for the Havasupai: The Havasupai claimed they used to live in this area before going to the canyon. The very name of the forest comes from the tribes. The Coconino has a large responsibility to the history of the tribes and to manage it consistent with their needs.*

From this perspective, the history of Indian relationships with the land is integral to the identity of the forest; and, this implies management will be “consistent with their needs.” Although not all participants in this work share this perspective, it illustrates the construction of issues and solutions based on assessments of forest characteristics and conditions. The remaining subsections identify some of the prominent themes about these topics.

## **Amenity and Aesthetic Value**

The forest has strong aesthetic and amenity values that are important to new as well as established residents:

*Up on the rim it is quiet and beautiful. We have four seasons, they are not severe. You cannot imagine how wonderful it is. People want to be here because of the natural resources and the beauty. And, there are people who have children who live here and they want to have their children grow up here.*

And,

## Results

*The people that are moving here are coming here because of resources like the forest. We are getting lots of young retirees. Lots of growth is coming from them and they are more active than the generation before them. The reason they are choosing this area is the forest, it is right up there with health care and climate.*

*The forest does need protection. It is a unique forest. This Verde Valley with a river running through it, with the scenery in places like Sedona that are a world-wide attraction, that beauty is unique. The Verde Valley is now attached to that. A river that runs all year long in Arizona is an asset. The availability of all kinds of activities and scenery, seeing the sunset hit those Red Rocks; that is incredible. There are not a lot of places you can see such scenery.*

Such assessments suggest place attachments have strong amenity and aesthetic components that are likely to motivate concerns about how forest resources are managed for these values.

### **Access and Proximity**

Participants also describe the value of having forest resources nearby. The proximity of these resources provides opportunities for recreation and respite that residents of both urban and rural areas value. However, for those residents in more populated areas, this accessibility also has some liabilities:

*One of the things we like about Sedona is the forest being so near. One of the things we don't like is the forest being so near. There are problems with hunters parking their cars near us, and problems with noise from ATV riders and jeeps. And there are some law enforcement problems that need attention. But, part of what we like is that it is nearby and accessible to us, but because of problems, there needs to be some enforcement.*

Despite these liabilities, a strong theme in participant statements is the importance of nearby forest lands that enhance local lifestyles, in part, because they are easy to access.

### **At-Risk Resources**

This theme is closely related to participant assessment of overall forest conditions, but it highlights an assessment that forest health has declined and resources are perceived to be “at-risk.” For example,

*The forest health issue is really important because forest health has seriously degraded since the last Forest Plan. This area has been harvested for a hundred years and that used to contribute to forest health. There are still products coming off the forest, but there is not much management as there used to be, road systems have deteriorated to horrible conditions. The logging industry built and maintained many of those roads in the past, but maintenance of roads hardly happens today because there are no funds for doing it. We see disease just taking over our forest and it seems there is not much we can do because of the management practices of today.*

Resources are perceived to be at-risk from a combination of past management practices, ecological conditions (drought), and the current management approach of the Coconino NF. Participants also believe limited funding is placing resources at-risk:

*Because of the money situation in the Forest Service, conditions in the forest have degenerated. Every time you need a trail fixed or a campground upgraded, all we hear is that ‘we don't have*

*the money.' I don't fault the folks there, but there is not the money to do what needs to be done. ... I don't know what that means for the future, but it is a concern....*

### **Identity Issues**

Forest lands are described as diverse and contain a mixture of landscape and vegetation types that are not always consistent with traditional images of forest lands, especially the more arid portions of the Coconino NF. This implies some need for public education about forest characteristics:

*People come out to visit us from the east and you drive between Cottonwood and Sedona and they see the sign 'Coconino National Forest' and they start asking, 'well where is the forest?' They have a different image of what a forest is that is different than what is here. But, those are also the types of people relocating here. There needs to be some outreach to those people to know what is unique about this national forest, what are the issues, what are the ethics in how you use it.*

A related theme is expressed in the following statement that describes the intermingling of state, federal, and private lands in this area:

*There is a mixture of state and federal land in this area and people don't always know if they are on state land or Forest Service lands. I see them calling State Park Rangers Forest Service Rangers and just not knowing where they are because of how things mix together around here.*

### **Now and Then**

There is a strong “now and then” theme to the statements about forest conditions and characteristics: participants perceive a different forest from the past, although the substance of the difference varies considerably. Some of this substance is expressed in the following participant comments:

*The forest used to be a place to hunt, fish, camp and do what you want to. That is what they used to manage (those types of uses). Now, it has changed because of pressure and it now feels like it is more regulated, restricted, and it is a different place than it used to be.*

In this comment, the perceived intensity of use and the growth in regulations has resulted in the perceived loss of unregulated use, a once valued characteristic of forest lands. Other assessments focus on resource changes:

*There has been a change in forest conditions. Since the 1919 seed crop and fire suppression, there are 3.4 million acres that have become a problem. There needs to be a commercially feasible industry that uses the resources. If you harvest trees and you have a place to take them, then you are going to get some revenue from them ... but at least there will be some commercial benefit and some benefit to forest health.*

And,

*It is not pretty now compared to the way it was. What we are seeing is instead of being managed as a resource and using the lumber that comes out of there to get some revenue, is the opposite. The Forest Service is paying people to come take trees away. That is totally screwed up. Even though the wood is not marketable, there needs to be some way to find a use for the wood like an OSB plant or something.*

## Results

These and other statements suggest some participants assess existing conditions as degraded from the past; and, these conditions result from the combination of decreased timber harvesting and increased growth of even-age small diameter trees.

A different “now and then” perspective suggests that “then” forests were over-harvested, especially large diameter and old growth trees. Existing forest conditions are perceived to be degraded by prior harvesting and grazing activities; and, old growth and other large diameter tree resources are especially valued because they are believed to be either in short supply or threatened by pressure for harvesting these resources.

These contrasting perspectives about “then and now” indicate essential differences in the construction of “the problem” and “the solution.” Recognition of these differences implies a need for clarity in discussing forest conditions and promoting solutions for a healthy forest. “Then and now” perspectives can be silent assumptions in the dialogue about forest management.

### **Pressure**

Population pressure from Phoenix, population increases in counties adjacent to the Coconino NF, and visitation by out-of-area and out-of-state visitors each contribute to a perception of forest resources as “under pressure” from increased use. This is especially the case in communities such as Sedona where the Red Rocks and other natural attractions exist:

*There is probably no where else in the country that gets the visitation we do outside of a national park.*

However, residents in more rural areas also perceive there is increasing pressure on forest resources:

*People used to just camp in the high country, but now they are camping anywhere they can. More people are coming here to use the resource and it is showing in the litter and just how often you find people where you never saw them before.*

Such assessments contribute to participant views about the need for enforcement, needs to protect existing resources, and the means to effectively manage human uses of forest resources.

### **Agency Presence and Procedures**

A third component of the planning environment is public assessments of existing management of the Coconino National Forest. Such assessments express beliefs about topics such as constraints on forest management, the trust and faith stakeholders have in management, the perceived viability of public involvement, and stakeholder influence on forest management.

These are central issues in discussion group dialogue about forest management issues. The identified topics were categorized into three groups: sidebar issues that cannot be influenced by agency management, but which affect how management actions are perceived; institutional issues that express more general assessments of Forest Service culture and management procedures; and Coconino NF specific issues that express assessments about issues that can be affected by local managers. Each of these is briefly summarized below:

## Sidebar

When participants were asked open-ended questions about forest management issues, several topics emerge. These topics do not appear to be unique to participants in the Coconino NF discussion groups. They are usual responses from participants in discussion groups held with participants in communities adjacent to other national forests in Arizona and New Mexico.

These sidebar issues are relevant because they identify topics participants believe to be important influences on forest management or issues that managers should address in future planning. Although the types of issues may or may not be relevant for revision of existing forest plans, the responses of managers to these issues when they are raised are likely to be important.

- The Endangered Species Act (ESA) is perceived to be either an impediment to effective forest management or essential to the forest manager's toolkit. Some participants focus on the spotted owl, goshawks, or other species and argue forest management is controlled by "arbitrary use of the Endangered Species Act." While some participants are cognizant of the limits of the Forest Service to respond to ESA issues, others perceive the agency has a choice in responding to ESA issues. Clarification of agency roles and responsibilities vis-à-vis the ESA may help sharpen the focus of forest plan revision efforts.
- The process for implementation of the National Environmental Policy Act (NEPA) is perceived as too cumbersome, too time consuming, and often off target. For example,

*We just went through a multi-year process, an EIS process and I am not sure the process was really addressing all the right issues. The process is so cumbersome and are we looking at the right things? It seems that by the time we are through, the problem has changed.*

- National interests are perceived by some to trump the knowledge of local stakeholders who may have more direct knowledge of issues:

*A lot of the problems that have been caused are at the national level and not at the local level. There are lawsuits at the national level .... it has caused delay and delay ... this national framework constrains what can be done at the local level such as timber cutting, putting in roads, all kinds of things that should be controlled more at the local level than at the national level.*

Some participants believe that local interests should have more influence on management decisions that affect lands adjacent to their communities, but they perceive "national" interests as having more influence through the court system.

- "Politicians" exert influence in response to constituent concerns about forest management issues. Political influence is perceived to undermine the application of good science in favor of managing for "special interests." This assessment identifies forest planning and management as an arena for different political interests to express their respective perspectives. While this may or may not be an accurate assessment, these views are likely to influence the type of dialogue that occurs in collaboration and public participation efforts.

## Institutional Issues

Forest planning and management are among the most frequent topics in discussion issues. A portion of these comments address institutional rather than forest specific topics. Issues regarding how the agency is structured, funded, and has historically conducted its mission are topics of concern to participants. These topics also affect how participants are likely to approach the planning process. These are similar to the sidebar issues noted above in their implications: it is unlikely they can be influenced by local managers, but the topics may emerge in future discussions with stakeholders.

- The tenure of managers is problematic because it disrupts working relationships with local communities and, new managers may try to apply management approaches that are not suited to local conditions:

*Just about the time we get someone to work with us, then they transfer. And you never know if you are going to get someone from the Northwest that will come in here and try to manage our forests the way they did in Oregon. We are not the same.*

- There are “old school” and “new school” agency staff that approach problems differently:

*There are old-timers in the Forest Service and their attitude is to support the extractive industries. That is their priority and they don't see things any other way. They tell you they are part of the Department of Agriculture and their job is to produce commodities. That is old-style and they use that as an excuse for why they are not keeping up with recreation issues.*

- The agency mission is unclear and has become muddled by political influence. Some participants suggest they are unclear about the Forest Service mission. Priorities, responsibilities, and the purpose of the agency are unclear. Other stakeholders argue that forest management has become a process of yielding to political pressure and the result is the loss of agency mission:

*The Forest Service is stuck trying to be all things to all people and then they never get anything done.*

- A related theme is the desire for the agency to have clarity about its mission and to have effective resource management as the priority:

*They need to 'look at the greater good' and do what is the right thing for the resource and not what is right for their career, not what the timber industry wants, or not what the environmentalists want. Just take a stand for what is the right thing and do it without thinking about which way the wind blows.*

- Agency paralysis is perceived to impede effective and meaningful management of forest resources. The prominent theme is that the agency has become ineffective because of too much attention to process and too little attention to action to manage resources:

*There are a lot of forest management problems. And many of those problems would go away if they just managed the forest. They need to take some action and if they do, then many of the problems with fire, forest health, the need for volunteer help, then many of the problems go away. If the regulatory burden (is removed), whether it is archaeology or*

*NEPA or blah, blah, blah, then things could get done and many of the problems will go away.*

*The BLM system is not broke. The Forest Service system is broke. BLM operates on standards and guides but the FS operates on dot this “i” and cross this “t” and if you don’t do those things then they get sued on process. This system is just plain broke period. Get rid of that. You can’t do that in the Forest Plan. They can’t put too many “i”s and “t”s in the Plan or it will have the opposite effect of what they want. The folks in the Forest Service know that. The point is that we are tired of hearing that things are going to change and nothing changes ..... The solution is going to have to start higher up.*

- The overall effect of diligent and well-intentioned local managers is perceived to be undermined by a compromised organization:

*The Ranger here (Sedona) is very good to work with, but he can only move one degree this way or one degree that way. He may be boxed in by his own organization because things are so political. We would like to see things less political and more consistent management that is dependable.*

- Funding of the agency inhibits effective management of resources. Some perceive this funding is a consequences of other national priorities while others argue the under-funding has changed as extractive industries have declined:

*What we hear from them all the time is no money, no man power, blah, blah, blah, blah. It is the Forest Service that is broke. If you go back and look at who used to blade the roads and take care of things, it was the timber industry. They have never replaced that structure and so there is a vacuum. So, now they want to close everything because they don’t have the dollars or manpower to manage it. So, recreation users find that unsatisfactory.*

- The agency has made some positive changes in its relationships with stakeholders and other interested parties:

*Twenty years ago the Forest Service didn’t ask us how we would like to see the forest managed. The Forest Service dictated what you could and couldn’t do. Now, they are reaching out and asking us about what works and what does not work and what the effects are on our communities. That is a good change.*

- Publics perceive a need for the agency to partner with other organizations to fill a growing need for education about values and ethics related to forest resources:

*Somebody has to educate the public that you don’t get something for nothing. I don’t know if it is the job of the Forest Service or not, but someone has to educate people about being responsible for the resource and taking care of it. Whoever is going to take on the notion, we just can’t keep abusing the forest without some form of revenue to keep it healthy and maintain it.*

## **Coconino National Forest Management**

Despite the sidebars and agency culture, administrative reality exists where the people meet the trees, procedures, policies, and people of the Coconino National Forest. Participant comments

indicate several themes about management and relationships with citizens that contribute to the planning environment for the Coconino NF. Themes about the Coconino NF have two major components: (1) community relationships and (2) management policies and procedures. The substance of these themes is summarized in the bullet list below.

### **Coconino NF-Community Relationships**

Comments about Coconino NF relationships with adjacent communities have several sub-themes: history, communication, partnerships, public involvement, and use of volunteers.

- History. There are two major themes about the history of Coconino NF relationships with communities. One concerns the San Francisco Peaks Snowbowl decision and the second concerns Amendment Twelve. Among other things, the Snowbowl decision allowed the use of grey water for snow production at skiing facilities on the San Francisco Peaks. This use was not supported by Native Americans who regard the San Francisco Peaks as sacred. Some participants suggest this decision established a gloomy precedent for future public involvement efforts with tribal and non-tribal communities:

*The Forest Service failed to mitigate the adverse impacts of that decision. And they failed to fulfill a mandate they have. So, I think they will do whatever they want in the future. They failed to show basic human respect to hundreds of thousands of people in Arizona and New Mexico. There are ways to show respect for the tribes and a way to maintain snowplay. But, the Forest Service basically was not creative enough to come up with a solution that would satisfy the tribes and satisfy the Snowbowl. It is terrible for an agency to perpetuate years of discrimination and racism. When I talk to (Native Americans) that is how they take it. Prior to this decision, they made great strides in their relationships with tribes. The Forest Service knows the places on the map that are important to the tribes. But, with this decision, they took twenty years of progress and ripped it apart. The communication gaps that had been bridged are lost now. They (Forest Service) know this. There is a story about a workshop the agency had on Federal Indian law. People from the Coconino were at that workshop. A representative from one of the tribes was asked to come and speak about how the Forest Service consults with them. This particular representative said he was going to talk about the Peaks. They (Forest Service) said, 'no you are not, you are not going to talk about that.' They knew it was so destructive. It is just terrible. In future management decisions, how are they going to treat the rest of us if that is how they treat the tribes?*

There is also some perception that existing leadership is compromised by the decision:

*When they are going to make a decision like that, they often bring in someone just to do that. They take the heat, and then they transfer them after a certain time. I think that is what they did on the Snowbowl decision. I am not sure if the Supervisor is going to be there very long or if there is the will to do anything new other than just steer the ship until the next one comes along.*

Such statements, although not pervasive, express a theme about the effects of the San Francisco Peaks decision on expectations about future public involvement and the continuity of leadership about important forest management issues.

The Amendment Twelve <sup>2</sup>history also has contrasting themes. One emphasizes the value of the process in involving publics and responding to consideration of local issues. The other is critical of plan implementation based on that public input:

*The agency continues to reinvent the wheel. For example, Amendment Twelve is a tolerable framework to work within and it serves as a starting point for issues about forest management, communication, etc.... Adhere to what already exists; enforce the provisions of Amendment Twelve. Most people I talk with agree this framework can be effective. Amendment Twelve outlines what needs to be done ... so just read it and do it.*

These comments are consistent with other assessments of a perceived need for the agency to implement and take action on what is already known about publics needs and desires for effective forest management: For example,

*People say, 'Hey what happened to that 1989 Environmental Assessment that allowed a maximum number of people per year' but now there is an unlimited amount of commercial tourism. People then bring lawsuits because nobody else is taking care of it. ... They can't undo what they have already done ... because they will get (criticized) by the commercial jeep companies. So, they have to be called to task by a concerned citizen or an environmental group.*

- Communication is a pervasive theme about community-forest relationships. Some comments indicate desires for changes or improvements while others note positive evaluations of communication efforts. The desire for improvements in communication is illustrated in the following excerpts from participant comments:

*Last spring the Forest Service showed a film, the "Greatest Good", and people that went said they got a lot out of it. Maybe they should consider doing more of those kinds of things. If they did more educational stuff, then it can go a long way. ... But, that movie was done on such a small scale in Sedona. It was almost like it was by invitation only to people that have showed an interest in forest issues. They were preaching to the choir at that point, those people know the issues. But, if they made that effort more mainstream by partnering with other organizations to reach a wider audience, it could be a good thing.*

A more generalized comment about communication efforts is illustrated in other comments that desire more graphics and written communication about key issues and policies as well as better use of electronic media. For example,

*As much as we complain about communication, they have made some vast improvements recently. You can go to their website and find out what is closed and what is open. And they are emailing outfitters and guides on daily basis information about closures, so that is the whole direction they should keep going. ...*

*... I know they have a PR (public relations) person, but she is challenged with reporting on fire status and stuff like that. ... They need to get updated on electronic communication .... They are not up-to-date enough to be able to send out emails to their interested parties. ... They did start doing that for the outfitter guides just this winter. ... It is better*

---

<sup>2</sup> Amendment Twelve addresses only the Sedona and Oak Creek Red Rock portion of the Coconino National Forest.

*than it was, but they need to be better at that than they are. We know they are hesitant to go on record in writing, so that may be part of their reluctance to use email more.*

The most positive comments about communication concern providing information about fires and fire danger. This may be a useful starting point for consideration of other communication policies and procedures.

- Sentiments about partnerships are among the strongest expressed about community-Coconino NF relationships. Participants suggest the need for partnerships with the agency is particularly strong because Coconino NF managed lands surround their communities. Participants see opportunities to develop new partnerships and build on existing working relationships that would benefit local communities as well as the condition of forest resources. The desire for “partnership” on resource issues is expressed in the following comments about Amendment Twelve:

*We want to see them partner with different organizations. When they did Amendment Twelve, we had public forums, and invited a cross-section of people. A facilitated forum is helpful ... speakers, facilitators, break out sessions in depth, that results in a white paper that suggests to the Forest Service what our wants are. There should be some outcome that comes out of it. The Forest Service should allow people to work with them and give input about what the Plan should be. That is a partnership. If they just come to us with a Plan and say, ‘this is what we have decided to do’ well, that is not a partnership. We would like to be involved in developing a Plan and we want them to be partners with us and be part of the process.*

Communities such as Sedona perceive the need for extra attention to resource issues because of the relationship of community boundaries to forest lands:

*In high use areas such as this (Sedona) there is a real need for partnership. There is a need to work together and some more outreach to partner with community groups. Maybe they need to streamline some of the processes for doing that. In an area such as this (Sedona) where you have great resources, they could take advantage of the wealth of human resources we have.*

There is also a desire for improvements in the quality of working relationships and partnerships that participants perceive as providing direct benefit to management of forest resources:

*When we want to do improvements to a roadway we have to go through a long, lengthy, drawn-out process and pay extravagant costs and it is to benefit the Forest Service. Seems to me the partnership could be cleaned up a bit so the bureaucracy is taken out of it. .... Citizens, if the process was friendlier, would deal more directly with the Forest Service. But often they approach the county or city because they feel they have to turn it over to a ‘professional’ to deal with them (Forest Service). So, they are asking familiar bureaucrats to deal with federal bureaucrats. So, if the process was friendlier, if the attitude was more helpful, then it would be a better interface between the Forest Service, citizens, and local governments. .. Some of the things they do are crazy. They are not common sense, they are not friendly, the attitude is bureaucratic rather than getting something done. They need to learn how to cooperate, lower the drawbridge, and get*

*things done. If you have that spirit of cooperation, then citizens can become a force to help the agency.*

The assessments of cooperation and partnerships appear to vary district by district, with a focus on Sedona as model of both positive working relationships and the opportunity for building new working relationships.

- Public involvement is also a priority issue for participants in all discussion groups. Several sub-themes are expressed in the issues raised about public involvement: (1) satisfaction with Coconino NF work with groups such as Friends of the Forest that illustrate productive working relationships with community groups; (2) positive evaluation of the range of public involvement activities that characterized the Amendment Twelve process; (3) a desire to build on the Amendment Twelve process by offering a wider range of ongoing venues to offer input regarding management issues; (4) a desire for more feedback about the basis for management decisions when public input has been solicited; (5) and, a desire for more “active listening” about public concerns:

*They need to hear from people and do active listening so they can understand peoples’ needs when it comes to the forest. They tend to go toward open houses and they set up these stations and it creates more of a burden on people to speak up to the Forest Service. I would like to see the leaders listen to what people have to say rather than ‘come to my station and see what I have to say.’ I want them to engage us more by saying, ‘Tell us what is impacting you?’ or ‘Tell us what you want to see done on the forest.’*

Participants also emphasized a desire for “collaboration and not just information exchange” in public involvement activities.

- Participants expressed a desire for an enhanced approach to using volunteers. Residents of nearby communities perceive they have a stake in maintaining resources they value and use. There are some assessments that a willing pool of volunteers exists to assist the agency, but bureaucracy is inhibiting mobilizing and using these resources. For example,

*I asked someone about using volunteers to do some of the thinning, and I was told that it creates such a liability that it is virtually impossible to do it. So, this is a big roadblock to getting some work done by volunteers. They could get a lot of help if they could find a way to streamline that. We know there is a problem if someone gets hurt, but there has to be a way to work around that problem. They need to reduce the regulatory burden so they can get the job done.*

*They have to do something new to interface with people who don’t work for you, but are willing to help and volunteer. Somehow there has to be a program or a better way to use the volunteers that are willing to work. There are hours and hours of manpower out there willing to help out. We are a volunteer country. We were brought up to volunteer. All they have to do is say they need us and we will be there. The biggest roadblock is they don’t know – some people know, but there is just not a forest-wide acceptance of volunteers and how to use them.*

Participants suggest that organizations such as the Diablo Trust, Friends of the Forest, and local governments could work as partners with the Coconino NF to enhance the use of volunteers who are willing to offer their time and labor.

## Coconino NF Policies and Procedures

The second category of comments concerns Coconino NF policies and procedures, including management consistency, liability concerns, and staffing. Participant comments about these topics appear to over-lap with other beliefs about agency culture.

- Participants identified management consistency across districts as an area for improvement. For example,

*Policies vary from district to district. If you go up to Flagstaff, the rules will be completely different, or if you go to the Prescott, they do things differently there. It is weird. We are not sure what we are dealing with here and it is confusing.*

A related but different concern expresses a desire for more internal consistency of management that result from turnover of leadership. This is consistent with concerns expressed about perceptions of frequent rotation of personnel from one position to another. For example,

*There is a disconnect between people who come and go at the top and the people in the field who have been there for a while and do the work. There is not continuity there, it ebbs and flows, and ebbs and flows.*

This comment expresses the observation that managers, who come and go, may not listen to staff that have local understandings about issues and the result is, from the participant's perspective, inconsistent management approaches.

- Fear, Loathing, and Liability. Participants express the belief there is too little action and too much bureaucracy in existing forest management. This belief applies to the agency as a whole, but it was also expressed specifically about Coconino NF management approaches. Participants attribute this inaction to three sources: (1) fears about making a career-damaging mistake; (2) liability fears; and (3) a focus on process and not outcomes in decisionmaking. The following statement expresses:

*What the Forest Service needs is a therapist. They have this fear, this over-riding fear and they need to get a little backbone. They need to stand up, get some courage, and get some things done. It is really a Forest Service-wide problem. The Ranger here bends over backwards to interface with the community and he will meet with you whenever you ask. ... It is a complex public out there and we know it. We know you can't please everyone. What we expect them to do is look at the greater good and find the conviction to make the hard decisions and do what is right for the community or for the Forest Service. Well, what happens if they don't tow the mark is they get sent to Alaska or somewhere. ... So, they operate on fear or they get transferred.*

A similar sentiment is expressed in the following comments:

*There is a 'cover-your-ass mentality rather than a get things done attitude.' It is fear-based. If someone is going to do something (management action) and if the studies are not done, then they will get in trouble. The fear thing influences everything they do and it is a problem. ... I think the Ranger is a good guy, but when I talk to him, what I see is a reaction based on fear. It is him saying to himself, 'If we do this, then we are going to piss*

*off some hiker or we are going to end up in court.' They are not getting things done because of this fear....*

The expression of management based on “fear” is exemplified in participant comments about permitting. Permits for commercial operators and permits for organized activities were topics of lively discussion because these issues are believed to illustrate excessive concern with liability issues. For example:

*Even when they did the last management plan liability concerns were just starting to be an issue. Now, anytime you want to do anything, have a foot race or a bike race, any kind of event, then there are permits and liability issues. In 1980 if you did an event, there were not many hoops to jump through. But, now there are so many hoops you have to jump through ... because of liability fears. People are just not using the forest or they are using it without permits because the process is so bureaucratic and unfriendly. They need to fix that.*

Staffing issues received some limited but noteworthy comments. One theme praises the Coconino NF for hiring specialists such as archaeologists and particularly wildlife biologists who bring expertise to managing valued resources. The second theme concerns the belief the Coconino NF is under-staffed and paperwork consumes more personnel and resources than work with forest resources. Some participants expressed the belief that the effects of paperwork on staff time in the field:

*...hinders the end-user, it hinders the Forest Service and it is a problem that needs to change.*

The actions, assessments of management approaches, and relationships with stakeholders and constituents contribute to the planning environment for revision of existing Forest Plans. Public assessments of trust and credibility influence evaluations of the capability of the resource management agencies to manage forest lands and resources (Cvetkovich and Winter 2002; Shrader-Frechette and McCoy 1993).

## **Multiple-Use Beliefs and Values**

Discussions about the use of forest resources included topics about commercial, recreational, illegal, and other types of uses and users as well as participant assessments of fees, permits, and enforcement issues. The concept of multiple-use appears to organize much of the discussion about uses and users summarized in this section. The summary of issues presented is derived from exceptionally rich detail about how participants understand these issues in terms of problems, effects, and solutions.

### **Multiple-Use Issues**

Participants expressed a range of beliefs and values about multiple-use. These are summarized in the following bullet list of questions and concerns derived from the substance of comments about this topic:

- In the past, timber harvesting and grazing have been essential to the implementation of multiple-use. Can forest health be maintained without these types of uses?

- Can protection of valued resources such as old growth coexist with timber harvesting and other extractive uses?
- How do users coexist when some types of uses appear to infringe on the experiences and values of other users?
- Is “sustainable usage” a component of multiple-use? That is, at what point does the volume or type of use require regulation to ensure the health of resources or the expectations of other users about the quality of their experiences when using forest resources?
- How will the Coconino NF manage the effects on resources and user experiences as the types and volumes of use increases, especially with pressure from population growth?
- The process of managing forest lands and resources in a multiple-use environment should strive for “balance” and recognize the “greater good<sup>3</sup>” when decisions are made. Although assessments of what constitutes “balance” may differ, the Coconino NF should have a role in assisting stakeholders to reconcile those differences.
- Although some view access to a multiple-use forest as a “right,” others emphasize such use is a privilege with entailed responsibilities for stewardship of the resources used.
- Illegal uses especially drug activity, squatting, and poaching are perceived to be increasing in intensity and deterring other users. Participants also suggest that agency response to these issues is consuming resources needed elsewhere:

*These (illegal activities) seem to take lots of resources. There are squatters out there and people doing drugs and growing drugs. I think it is a large issue and I don't know how much of their (Forest Service) resources are taken up dealing with those issues, but it is a problem.*

These issues and questions were inherent in the discussions about multiple-use beliefs and values. These issues are also in the background, and sometimes in the foreground, of the discussions about uses of forest lands and resources.

## **Commercial Uses**

Participants identified timber harvesting, grazing, and tourism as the principal commercial uses of the Coconino NF. Timber and grazing are described as “limited” commercial uses whereas commercial tourism is understood as thriving and growing. Participants appear to perceive recreation as a more prominent use of forest lands and resources, especially in recent years with the decline of timber harvesting and some grazing uses. For example,

*Commercial use of this forest is almost completely gone. The spotted owl pretty much devastated what was left of the timber industry. There are still some ranchers holding on, but those types of uses are not what they used to be.*

Some participants suggest timber harvesting and grazing benefit forest health and should therefore have a place in a multiple-use forest:

*From a forest health perspective, you have to have some type of timber industry. You just can't turn a living thing loose like the forest and expect it to take care of itself. You need management*

---

<sup>3</sup> This use of the term “greater good” refers to participant comments about perceptions of the “greater good in the use and management of forest resources. The “Greater Good” is also the film portraying the history of the Forest Service.

*and without it you get what the Coconino is today – an unhealthy forest that is too thick and ready to burn up.*

And,

*The only problems we have are when fences are down and the cows get on private property. But grazing is a good thing because it benefits the forest. It is another one of those things where the Forest Service has learned to manage it and as long as it is managed, then it should be allowed to continue.*

Yet, there is also concern that these types of uses have not been effectively managed with adverse consequences for forest health:

*Historically, what happened was once they took fire out of the forest and then allowed cattle in, then the cattle ate the grasses that carried the low fires that took out the seedling trees. So, lots of non-native trees came in. I have no problem with cattle grazing, but it has to be part of a larger plan. The problem has been a hundred years in the making. The jury is out on if grazing can benefit the forest the way it is managed now.*

Commercial tourism is most prominent in the environs of Sedona where jeep tours of the Red Rocks and surrounding areas draws visitors nationally as well as internationally. This use is perceived to be increasing:

*People are feeling less elbow room out there now. There are more pink jeeps, more jeeps of all kinds, and airplanes buzzing low. You have to go further and further out to get the same experience now. And this use is just increasing all the time.*

Although participants acknowledge the legitimacy of commercial tourism, there is also a desire among some participants for more attention to the compatibility of commercial tourism with other types of recreational use.

## **Recreation Uses**

Residents in adjacent communities as well as visitors from Phoenix and beyond use the Coconino NF for hiking, horseback riding, snowplay, mountain biking, off-road vehicle activities, hunting, fishing, and other recreational pursuits. Prominent recreation themes in participant's comments include: increased demand; concerns about OHV use; system trails and social trails; mountain biking issues; and, unmanaged shooting.

Participants observe that although recreation use is increasing, resources and planning for recreational use does not appear to be keeping pace with demand For example,

*They are not planning enough for recreation. When I was working in the valley (Phoenix area) the stressors were just really high. Then I would go four-wheeling and that would keep me from going crazy. There are a lot of people that way. They have to have some recreation, but the forest isn't planning for that. They are talking about closed unless open issues and not about accommodating recreation.*

Off-highway vehicles (OHV) use is perceived to be increasing; and, there is a diversity of opinion about how to accommodate this activity on forest lands. This type of use generated some of the most detailed discussion and diversity of opinions about problems, effects, and solutions of OHV

use on forest lands. The highlights of topics identified by participants as issues regarding OHV use are presented in the following bullet points and quotations:

- OHV use is perceived to be one of the common and growing uses of forest lands, a substantial change since the last Forest Plan.

*The normal campsite now has a small RV and a trailer with at least a couple of ATVs attached. It is a loud experience unless you are pretty dispersed. The traditional camping experience we used to have is gone now because ATVs are just more prevalent.*

- The volume of OHV use is assessed as creating problems for other users as well as causing some resource damage. Without enforcement, those causing these problems will inhibit other users from access to forest resources. And, publics perceive that Coconino NF managers under-appreciate the scope of this problem.

*There are so many people out there with four-wheelers now it is a problem. They (Forest Service) don't have the money to enforce the problems. I can understand the closed unless open idea, but I am opposed to it. Still, they need to have some money for enforcement. Those of us in clubs do what we can when we are out there, but we don't have the authority. There has been recognition in the USFS that if they are going to do closed unless open, then you have to have a good trail system. If there isn't enforcement on closed trails, then people will go out and ride on closed trails.*

*They will say to themselves that they have paid 30k for their jeep to ride in the forest and they want to do that. There seems to be recognition of the need for a comprehensive trail system and areas. You can hand those off to volunteers to maintain. Now, that is a recognition of maybe one person (here at the local level), but I am not sure that awareness percolates up to the top of the forest. We are lucky the fellow here now is aware of the problems, but I am concerned about those above him. Without a trail system, you are challenging people to break the law. People at the field level get it, but you get people coming and going and who knows if the next person will get it.*

- OHV technology has resulted in more powerful vehicles with tires that allow travel to areas they could not previously access. These vehicles often generate more noise and disturb the experiences of other users. They also create illegal trails that present enforcement problems, vectors for non-native plants, and may affect closures of larger areas used by other OHV riders.

*ATVs have the capability to transform a landscape into a dust bowl in very short order. Like the west side of House Mountain, I have seen a noticeable difference in what that terrain looks like in the past few years because of the heavy ATV use. Then the Forest Service starts to think about trading it out (exchanging) because they say it no longer has the characteristics that are suitable for forest land. Education among ATV users is an important thing because if they keep that kind of activity up, then they will lose access....*

And,

*It used to be all you would ever see is a few motorcycles and jeeps out on the trails, but now things have changed. Now, you have everything under the sun out there trying to drive on trails they should or shouldn't be on. The Forest Service trying to manage those*

*impacts is hard. The technology has changed so much and I am not sure the Forest Service has kept up with what the impacts of that are.*

- Some types of users cause more problems than others. Participants generally perceive OHV club members as more responsible than other types of OHV riders. Riders from out-of-area with no ties to the landscape are described as most likely to be problem users:

*If you have a person in a four-wheel drive truck and he doesn't care and he thinks it is not his road and he does not live here, then those are the people who cause problems. During wet weather, the large vehicles cause a lot of damage and that damage lasts for years.*

Similarly, younger users are also identified as more likely to ignore trail closures, ride off-trail, exceed safe speeds, and engage in other problematic behavior:

*There is a trail behind my house and the ones that are roaring up and down it at high speed and whipping wheelies are the kids. I don't know where their parents are, but when I see a kid with an ATV, I usually see a problem. Those are the ones they need to target for enforcement.*

- ATV riders desire a range of experiences. Some prefer the opportunity for a leisurely trail ride and others desire a challenge. Some participants suggest these differences indicate “machine oriented” and “supplement oriented” types of users. The machine type user is seeking a challenge with the machine whereas the supplement type OHV rider is using the machine as an aid to other types of experiences with forest resources. Participants suggest that recognizing and accommodating the needs of different types of riders can reduce problems:

*People shoot out from the trailheads until they find some sort of challenge and then they go for that challenge. If you create a trail that had a challenge in the first place, then they would ride it. Now we see something like spokes on a wheel. Until they find a challenge, they trash that area, so a good management plan would create challenges. Unfortunately, management planning sees challenge as creating litigation. ...*

- A range of participants identified the use of trails in wet weather by four-wheel drive vehicles as especially troublesome because of the damage caused and the misidentification of those causing it:

*We are club riders and we know how to ride. We are disciplined and we have a great time. But, come hunting season, especially if has been raining, a lot of times they blame the ATVs for the deep ruts cut in the roads, but it is the four-wheel drive trucks. Why don't they close the roads to those trucks? Right in back of my house there is a nice road ... nice to walk and nice to get on the bike to ride. Last year four-wheel drive trucks went through there and now you can't walk or ride your bike there because the ruts are so deep. ... It is happening everywhere and they are blaming just the ATVs. They need to enforce existing laws.*

- The “closed unless open” approach to OHV management is perceived by OHV riders as problematic. These users argue that without adequate enforcement and trail signage, then this approach will be abused and “create criminals out of good citizens” because they violate the closed unless open policy.

## Results

- Off-highway vehicles riders and non-OHV users share beliefs in the desirability of designated use areas for OHVs.
- Successful management approaches and trail systems exist as models for the Coconino NF to examine. For example,

*Camp Verde is a good model for managing ATV use. The township has come up with their trail system that overlaps with the Forest Service trails. But, they identify it as Camp Verde's trail system. So, they have looked at specific areas for equestrian use, specific trails for motorcycle use, and others for mountain bikes. They are selecting trails based on their suitability. I am a motorcycle rider and I ride those trails, and they are good. And, because they are good, there is not much incentive to get off the trail and create a spider web of other trails. The trail itself is the attraction and it keeps you focused. I think their management plan is a good model.*

- Some participants suggest that OHV use during hunting season is especially problematic because hunters are firing at game from ATVs and other vehicles. These participants desire to see more aggressive enforcement of any illegal hunting activities associated with OHV use.

Participants identified several trail issues as important issues about the use of Coconino NF lands. Hikers, cyclists, equestrians, and other users of Coconino NF trail resources were especially passionate in their comments about existing conditions and desired futures for these resources. This indicates the importance of these recreation resources in what is perceived to be a recreation forest.

- Trail resources are generally perceived to be in short supply for the amount of demand. This is especially the case in higher use areas around Flagstaff and Sedona. The limited supply of identified or “system trails” has resulted in development of “social trails<sup>4</sup>”. The following comment, although specific to the Sedona District, illustrates a more general assessment of the supply of trail resources and its consequences for the official trail system:

*Before Amendment Twelve came along, there was all kinds of unmanaged use, ATVs and such, and then Amendment Twelve came along and that had a strategy to look at the social trails, find out what is sustainable and see if there is a need for any new trails. Well, the effect was to reduce the overall amount of recreational opportunity that was available because it became more restrictive. At the same time, demand is increasing. On an official basis, the recreational opportunities have not kept up with the demands for recreation opportunities the public needs. Visitation to Sedona is second only to the Grand Canyon, yet there are only 300 miles or so of trails. ... The fact that social trails keep popping up indicates there is a demand that is not being met by the official trail system.*

- Participants also suggest trail design issues are important because of both the volume and types of trail uses. While participants praised some design issues such as signage in the Sedona District, there is a perceived need to update trail designs to accommodate the types of use, including the necessity for designated use areas for cyclists, hikers, and

---

<sup>4</sup> “Social trails” refer to non-system trails that are developed by users or somehow otherwise not a part of the trail system of the forest.

equestrians. There is also a desire to incorporate a uniform trail system similar to those used in ski areas to identify the skill level required for safe use of a particular trail. For example,

*There used to be a uniform trail prescription, but Red Rock District adopted a trail classification system ... I would like to see some encouragement to use that system because it can help a lot of users.*

- There is some apparent frustration with assessments of how resources to respond to trail demand and use issues are currently managed. Some participants suggest the Coconino NF is using a punitive approach rather than approaching these issues with a problem solving attitude:

*They tell us they don't have the resources to sit down with us and plan a trail that we could get fifty volunteers out there to build. But they do have the resources to send fifty people out to tear out a social trail. It would be a lot easier to work with us rather than have this punitive approach to dealing with users.*

The desired change of focus from punitive to problem solving is also expressed in the following comment about the destruction of social trails that are well-used:

*They will find some social trail that is incredibly well built, it is so well done and people are using it. If the Forest Service had built it, then it would be one of their gems. They would be so proud of it. But, because they did not build it, they will actually spend money and time to go out and obliterate sections of trail. There seems to be an inordinate focus on if they built it or not. Their focus is not on how the trail meets a need. It is on if it is a system trail or not and if it is not, then they destroy it. That is just kind of weird. The focus should be that the trail is well built and there is a lot of traffic using it ... that is telling you something.*

- Mountain biking use is increasing, but some participants perceive there are insufficient trails to accommodate the growth in demand. Changes in mountain bike technology have also influenced the types of trails some riders desire:

*Mountain bike usage in the Sedona area has changed substantially. And they need to keep aware of what those changes are and how they affect demand on the resource. Ten years ago a thirty pound bike had no suspension, had barely adequate brakes, it had twelve gears, and you could go just adequately get around in off-road situations. Now, a thirty pound bike has six inches of suspension travel, disc breaks, twenty one gears, and the terrain that is open to a bicycle like that reaches a lot farther than what was possible ten years ago. The technology has changed, but the recreational opportunities have not kept pace and that needs to be looked at. When those opportunities do not exist, then people take matters into their own hands, and build illegal trails. ... You have to be prepared to make changes to the management plan based on discussions with users so that you have responsible land use and not illegal uses.*

The assessment of limited opportunities for mountain bikers is also illustrated in the following comment:

*If you are a mountain biker around here, there are not that many places to go. We got Thumper and that is it. You can ride Thumper ... I have ridden it over three-hundred times. I could ride it in my sleep. I would like to see them add another stacked loop to that, but because of the NEPA process and everything else, it is not going to happen. I know there is some trail construction going on, but it is discouraging that there are not more trail resources.*

Another recreation concern is unmanaged shooting. Participants expressed concern about the amount of shooting that occurs on forest lands and its interaction with other users. For example,

*I was out last weekend and we were camped up near (place name). We were about ready to eat and I heard this bam, bam, bam, bam, bam. It just kept up for a while. I have been around guns most of my life, but somebody shooting like that, you don't know if they know where you are. It happens more and more and I would like them to do something about it. I think it is just target practice, but maybe they need to have a place for it.*

Other participants expressed a desire for shooting ranges that provide an appropriate place for target practice and recreational shooting. This is perceived to meet the needs of those who desire this type of recreation and also protect the safety of other forest users.

## **Enforcement and Education Needs**

A strong and recurring theme about multiple-use concerns problem behavior and its implications for enforcement and education. Participants identified various sources of enforcement problems:

- The volume of users creates a greater pool of persons who will engage in problem behavior such as vandalism, violation of trail riding rules, illegal firewood cutting, or other illegal activity. Or as one participant suggested: *There is always a percentage of idiots, but with more people, the numbers of idiots out there just gets bigger.*
- Cultural and language barriers prevent some users from understanding the expectations, norms, and rules for use of forest resources.
- Diminishing stewardship values among users is resulting in increased abuse of forest resources.
- Users from out of the area and new residents maybe unfamiliar with rules and regulations and unknowingly become violators, especially when they use “social trails.”
- Some users believe they have the right to use forest resources without regard for the effects of problem behavior.

The perceived effects of problem behavior include disruption of the experiences of other users and resource damage from activities such as “dumping disposable diapers” at campsites, damage to meadows from off-trail riding by ATVs or mountain bikes, and damage to roads and trails by riding in wet weather. Participants also suggest an effect of problem behavior is the response of the agency to “close down” access:

*Since there are all these people demanding recreational opportunities and problems developing, and there isn't money to have enforcement people out there, the response of the Forest Service has been to close it all down. They said you can't go there: “closed unless posted open.” I am not saying that is an illegitimate response, but it punishes the many because of a few. We have seen it: they lock everyone out because of a few.*

Participants also have straightforward ideas about the solutions to problem behavior: education and stiff fines. Education is perceived to be the preferred approach because it can establish the expectations and understandings about appropriate behavior for all users. Social pressure along with enforcement actions then become different methods for addressing problem behavior. However, publics perceive there are too few enforcement resources and too great an enforcement problem to adequately respond to existing issues, let alone those that are on the horizon because of increased demand for use of forest resources. One perceived solution is for the agency to develop outreach education programs that inform publics about forest management:

*I am a hiker, a backpacker, a cyclist, and I use public lands a lot. I see lots of people out there and I think many of them do not know how their public lands are managed. It would be good to open the door and let people know how their lands are managed.*

Others suggest that with the limits on agency funding, education efforts are not likely to occur without developing partnerships with community groups, volunteers, and other organizations to provide information and education about land ethics and the use of forest resources. For example,

*We have a volunteer program in how to report violators and what information you need to take. You don't confront them you get the information and cut out of there. But, the Forest Service isn't taking advantage of that training and it could help the enforcement issue by using volunteers better.*

Education and information are not the universal solutions. Participants suggest that for some users, the remedy is to impose a strong penalty that will deter others. For example,

*What people are doing off-road during wet weather is awful. That goes to enforcement – if someone goes around a closed gate, they need to make an example out of that person. If you don't punish anyone, then others will do it, too. You have to make the fine significant. ... You catch a few evil doers and some people have to become examples. Selective enforcement works.*

### **Permits and Fees: “You can't see the forest for the fees.”**

Permitting and charging user fees are topics that evoke strong sentiments from participants. Some perceive permitting as a necessary but too bureaucratic process. And some participants believe fees are a legitimate charge for the use of resources, while other see such fees as either a “necessary evil” or as “double taxation” that places an undue burden on the public.

The prominent themes in responses about fees include the following points.

- User fees are unfair because they ask users to pay for resources that they already pay for through income, sales, and other taxes. User fees are thus double taxation. Some participants also suggest such fees inhibit the use of some resources by minority populations or the economically disadvantaged who cannot afford the fees.

*There is a lot of minority use of the forest. People from Phoenix (Blacks, Hispanics, Native Americans, Asians) and minorities from here use the mountain for snowplay. It is a significant use of the Peaks by minority population. They want to make a snowman, they want to sled. So, they drive up the Snowbowl road, they park, they sled, they hit a tree, then sue the Forest Service for liability. That is the main concern of the agency is liability issues. So, that is one of the reasons they really pushed the Snowbowl decision was that it*

*includes a snowplay area. So, they can better manage snowplay, but people are going to have to pay. And for a lot of these minority populations five bucks is a big deal. If you force people to pay to go sledding, that is an impact. There are places suitable for sledding that could be used, but they have these liability concerns. So, they are putting the impact on the minority populations (fee for use). Having to pay to visit the national forest is an undue impact on them.*

- Fees are also perceived as deterring other users of forest resources:

*Unfortunately, where the money has gone, it doesn't seem they are actually doing what they said they were going to do with it, so there have been a lot of negative feelings about it. So, I basically avoid going to those places where there are fees. When I want to go to a place where I used to hike in the past, I find myself saying, 'Ah, I just won't go up there.' The intent was for enforcement or maintenance, but the money that they were hoping they would get is not what they are getting, so now they don't have enough dollars to do enforcement or trail maintenance. That is what people think.*

- With demand increasing and agency resources not keeping up with demand, fees are among the options to ensure maintenance of valued resources:

*There is more out-of-area than local acceptance of fees. Some people who live here see fees are a necessary evil. With the economy and the demands on the federal government, there is no money in the budget to create recreational opportunities. As much as I detest the idea because it is double taxation, it is here and we have to pay to play. You just have to accept the fact this is what we need to do to maintain the resources we have in the area. Rather than let them deteriorate, it is preferable to keep up the resource.*

Some participants also express support for fees because they perceive no alternatives for improving existing conditions:

*We are ratcheting up our demands on public lands so that we expect everything. That is not the fault of any particular group, but it is expensive. The hikers want something, the bikers want something, the ATV users want something. How do you pay for those special needs?*

- User fees have some degree of acceptability if those fees are used to maintain local resources rather than spent otherwise:

*If the Forest Service had a mission to protect resources, like the Park Service mission, then it would be easier for them to charge fees. But, fees are still a problem for the Park Service. Personally, I have less of a problem if you go pay a fee and then those monies are used locally rather than they just go into the general fund. Some places are just loved to death and having people pay may just be a necessary evil. ... I think if you take the federal budget and rewrite the priorities, then you can have people use the forest without having to pay.*

- The intent of programs such as the Red Rock Pass is not clear to publics in adjacent communities. This is illustrated in the excerpt below from one discussion session attended by a group of knowledgeable persons. The P1, P2, etc... indicates contributions by different persons.

*P1: In some places like the Bull Dog Canyon area ... you get a permit, it is free, but you fill out a paper and they know you are in there. If anything happens in there, then you know they are going to come looking for you first, so the accountability is there.*

*P2: I think the Red Rock Pass works for the Forest Service. Ninety percent of the funds stay here for marking the trails and cleaning up the trails and all of that. Sometimes I am not real clear why the local community has such opposition to it. ... One of the things I don't have a clear understanding of from the Forest Service is it (Red Rock Pass) an access fee or a parking fee? It seems to be evolving.*

*P3: They call it a recreation fee. So, if you park outside of a trail ... and if you did not have a Red Rock Pass and you could not prove you were not recreating, then you would be fined. It is actually a recreation permit.*

*P4: It is technically a parking permit. You can walk in without any permit whatsoever. You can walk in, bike in, and fly in, whatever. So, technically it is a parking pass. It is a means of control.*

*P3: That is confusing.*

*P5: It is only a parking fee if you go away from the vehicle. You can park there and take pictures and so on.*

*P1: Just this discussion about the Red Rock Pass is the greatest symptom of what is wrong with the U.S. Forest Service: What is it? Who does it? When do they do it? How do they do it and why?*

Participants also perceive existing permitting processes as onerous, too bureaucratic, and as indicating an unwelcoming attitude by the Coconino NF.

- The permitting process is too complicated and bureaucratic:

*At a time when people are looking to use forest lands more, it is getting harder to do because of the freaking convoluted permits. It gets so complicated to get a permit that no one wants to do it.*

- The permitting process deters use of forest lands and resources:

*I think we have done only a few events on Forest Service land. One the last ones we had was right across the street from Bell Rock. We did not even go to Bell Rock because it is too much of a nightmare and here we were right across from Forest Service lands (because of the complexity of the permitting process). It discourages you from going on public lands.*

- The permitting process encourages responsible users to take inappropriate actions:

*People want to go out there and have a good time, but the permitting stops you. But, there are people that show up and go anyway. They make you feel like you are a criminal for engaging in a healthy activity. They could all be out smoking pot on the weekend, instead they want to do something healthy, but they make it into a crime because of the complicated permitting process. It is very discouraging....*

And,

*The regulations encourage end-runs around their (Forest Service) regulations. Mountain biking is a legitimate activity on forest lands and now they (Forest Service) are encouraging bandit rides. There are pressures to go out and do healthful activities, so why shouldn't they (Forest Service) encourage that rather than inhibit it.*

Participants expressed strong desire for a streamlining and rethinking of the permitting process.

## **Resource Benefits and Values**

Participant assessment of forest resources include the importance of wildlife, scenery, the economic opportunities offered by renewable resources, landscape diversity, and archaeological resources. However, several other major themes were prominent in participant discussions about the benefits and values of Coconino NF resources. These are briefly summarized in the following sub-sections.

### **Economic Benefits**

Forest lands are perceived to have important economic benefits for adjacent communities, primarily in terms of the scenic resources that attract tourists and provide recreational opportunities for visitors from Phoenix and other parts of the west. Although some participants note there was once economic benefit from timber products and there is some ongoing economic benefit from grazing, the most prominent assessment of the economic benefits of forest lands concentrates on the amenity and aesthetic values that provide economic benefits:

*Natural resources are what we have. It is an economic resource for our community. We live off tourism. If the quality of forest lands change, then it can hurt our economy. There needs to be a balance in how they manage, for sure, but they also have to remember we make a living here and what they do affects us.*

### **Social Benefits: Rural Places and Respite Needs**

Participants also describe two themes about the social benefits of forest resources. One theme concerns the relationship of forest resources to rural lifestyles and the other theme concerns the respite benefits of forest resources.

The forest enables a rural lifestyle and a sense of community that is in part created by shared values about forest resources. Among these participants, the presence of the forest is perceived to be integral to the benefits of rural living:

*We have a small community here and we like it. I lived in the valley (Phoenix area) twenty-seven years and I didn't know most of the people within a block of me. I know more than a hundred people up here and every one of them is welcome in my home. We share the value of the forest, the ambiance is important. We want to continue to be in a forest. We moved here to be in the forest.*

*It is a great place to live. We came up here to live after years and years of camping here and then we found a community of people who shared our appreciation of the place. Not everyone is fortunate enough to live here.*

*Just to know that you can sit out on your deck or patio and not hear traffic, it is important. I love that there is a place to be where we can be away from urban life. My wife went out on the back porch and heard an elk bugle. You can't hear that in the city. We don't want those kinds of things to disappear because of development.*

As the latter quotation suggests, participants desire to preserve the option for a rural lifestyle rather than have that option disappear because of development and population growth:

*We have a gazillion stars up here. It is quiet and nature is a beautiful thing. We all understand that if the time comes we can't live here, we don't want civilization brought to us. We will go back to civilization. We moved up here because we are forty miles from Wal-Mart. We like that.*

A different type of social benefit is expressed in participant comments about the psychological benefits of having access to forest lands and resources. Some participants view national forest lands as providing a respite from the stresses and tensions of modern life. Although these stresses and tensions are believed to be inherent to contemporary life, metropolitan areas are perceived to entail lifestyles that generate stress, social problems, and other tensions that can be addressed by the existence of natural places such as the Coconino National Forest. For example,

*There is real value in going to a place that is peaceful. People in the city need places like this. When we lived in Mesa, we used to have to leave early Thursday night to get up here and get our camping spot. There is refreshment that comes from being able to be in the forest and that is a benefit. Those people can go back to their jobs and be relaxed.*

And,

*I used to drag my boys all over the mountains on the weekends. Then we would go back to the city and you would feel like you just stepped out of a shower. You feel like you can go on for another week after that. I taught my kids how to treat the forest because it gives us that benefit.*

*In the cities, there is rampant crime and Meth heads and all these serious problems, so people are looking for things they can do that can make those problems go away. Some of that is having events away from the city where they can involve kids and have picnics and do things on Forest Service lands.*

Forest resource both enable a lifestyle and sense of community for some participants and for others living adjacent to and distant from the Coconino NF, there is a respite benefit that has psychological value for individuals and social value for their communities.

## **Place Values and Special Resources**

Participants discussed a variety of particular places from the Red Rocks and Oak Canyon to the Mogollon Rim, San Francisco Peaks and the Verde Valley Canyon. These types of places are perceived as “special” if not unique resources of the Coconino NF. Participants also described other “special places” such as a favorite ridge line, a little known flowing stream, and the top of a particular peak that offers a broad view of the landscape. Although the more well-known “special places” appear to have broad appeal to publics in this region, the variety of other special places identified suggests very localized assessments of places with special qualities. One implication of this assessment is that planning and management of forest resources may need to identify how these more localized special places may be affected by particular decisions.

The following are place characteristics that appear to contribute to the special qualities of particular places, well known or more localized:

- Places have historical value and meaning to groups or individuals, such as the religious and historical value of the San Francisco Peaks for Native Americans.
- Places have spiritual value that is a result of landscape features, aesthetic qualities, or historical events. The Red Rocks near Sedona are one example of this type of special place.
- There are particular resources such as plants, old growth, wildlife, or viewsheds associated with a place.
- Family experiences are associated with the use of a particular place. These places become symbolic of family or individual experiences.
- A view or characteristic of a place such as a combination of landscape features or the presence of particular wildlife is inspirational and evokes a sense of awe.

These are prominent qualities and characteristics of place participants identified as associated with special places on the Coconino NF.

Participants also identified other place values associated with the Coconino NF, including the following:

- Forests are a place to experience quiet and to hear natural sounds. These are perceived to be especially important resources for those in urban areas where noise is omnipresent. The opportunity to experience quiet and to hear natural sounds is described as a valued resource.
- Forests are important habitat for diverse wildlife and vegetation. Both wildlife and vegetation are perceived to have intrinsic values and instrumental benefits for humans as well.
- Forests are an environment for learning about nature and for scientific inquiry about ecological processes. They can be a “natural laboratory” for understanding the interaction of multiple species.
- The natural resources of forests provide a setting to experience nature that is otherwise unavailable to many citizens.
- Forests surround communities and create a natural boundary that limits urban development.
- Forests are a place that extend the boundaries of “home” to a wider landscape and offer the opportunities for nearby recreation and respite.

Coconino NF lands and resources offer users particular kinds of social and psychological benefits. These “place associated benefits” contribute to the quality of life of forest users and those who live in adjacent communities as suggested in the following comment:

*Preservation of open space is a huge factor in this area and the forest is a big part of that. I came here from the Phoenix area. When I left there, there just was not much open space close by. This is a very attractive place to live and the preservation of open space is essential to our quality of life. If you allow open space to disappear, then you have removed the qualities of the community that brought people here in the first place.*

## Controversial Resources: Timber, Grazing, Owls, and Wilderness

In discussions about forest resources, diverse opinions about forest resources were common, but three types of resources evoked strong sentiments about their use and management: timber, especially old growth, spotted owls or any species classified as “endangered,” grass for grazing, and wilderness. Views about these resources are characterized here as “controversial” because of the degree of diversity in opinions about their use and management. Controversy about these resources appears to have several components as expressed by participants in the discussion groups:

- Issues about the social and individual benefits resulting from the use of these resources. For example, critics of wilderness suggest that only a few “hearty souls” who can backpack into these areas, but whereas wilderness advocates suggest wider social benefits accrue to society from the existence of wilderness. Similarly, critics of grazing and the timber industry perceive limited societal or community benefit to how those resources are used but significant economic benefits to particular individuals. If a resource is perceived to benefit only a small group and that resource is also perceived to inhibit other users from other types of benefits (e.g., logging a wilderness), then public concern is amplified and the resource is likely to be controversial.
- Commercial use. This is a corollary to the “who benefits” issue noted above, but it focuses especially on the use for profit of public resources. Some publics are ideologically opposed to such benefit whereas others desire some societal benefits resulting from commercial use. Timber and grazing are the classic examples in the debates about who receives what types of benefits from use of public resources.
- “Protected” resources. Throughout the discussions statements about timber, grazing, wildlife, and wilderness, participants with divergent views describe the necessity to protect a resource they perceive as threatened or the effects of such protection on other resources and users. The spotted owl, fourteen inch and above diameter timber, or riparian habitat are frequent topics of these types of discussions. Proponents of protection perceive the need to conserve a resource as trumping the interests of other uses and users. Critics of protection perceive the “greater good” is underserved by over-protection of resources that inhibit the availability of other valued resources. The following comment about wilderness expresses this assessment:

*Right now wilderness designations exclude users, especially us mountain bikers that enjoy backcountry experiences. If there was a “backcountry” designation it would make sense. Wilderness takes an Act of Congress to start a chainsaw in a wilderness area that has had fire suppression for the last hundred years and needs to be thinned out and managed to become a fire tolerant environment. ... Maybe we have enough wildernesses already and we need other more viable preservation tools and designations ....*

- Intensity of use. Some resources are not “protected” by federal designations, but there may be policy or administrative restrictions on how much of a particular resource can be consumed or accessed. For example, advocates for old growth argue this is a unique resource that has been overused and under-protected; and, they argue it provides important ecosystem benefits. Others suggest old growth is a resource that should be used because it represents the natural cycle of a forest: trees grow and die; and, they suggest, renewable resources are “intended to be used.” Similarly, ranchers may perceive pastures as capable of more intense grazing whereas environmental interests may assess the same

## Results

amount of use as excessive and unacceptable. How much of a resource will be used over what period of time appears to be another key component of resource controversy.

Controversial resources have polarized debates about forest management and contributed to a climate of concern about the potential to resolve what appear to be stalemate issues. As the Coconino NF moves ahead with revision of the existing Forest Plan, these concerns about stalemates, the process of how publics will discuss these issues and the potential for civility in resolving fundamental differences are present in the social environments of surrounding communities. The components identified above point to some practical approaches to addressing controversial resources. When resources entail one or a combination of the above components, it is likely that participants in any collaborative or public involvement efforts will focus on the differences that create the controversy. If this is recognized, then one approach is to identify any common ground that can allow discussion of the substance of the issue. For example, controversy about closing an area because it is endangered species habitat can easily result in retreat into the opposite positions about the issue. On the other hand, if some intermediate solution is explored such as involving participants in problem solving to ensure adequate habitat and species protection without excessive restriction of use by others, then the potential to find common ground increases.

# Management Priorities and Desired Futures: Agency and Public Perspectives

As part of the pre-planning process in the Southwest Region, forest managers were asked to identify their perceptions of key issues for revision of existing forest plans. This pre-planning issue appraisal is compared with public appraisals of issues identified in the discussion group and individual interviews. The purpose of this comparison is to identify gaps or different views about what are important issues for the future of the Coconino National Forest. Such a comparison is one contribution to focus upcoming community-agency planning and collaboration efforts concerning forest plan revision. Both agency and public perspectives described here should be considered preliminary, but initial steps toward exchanging views about key planning issues.

## Agency Perspectives

Coconino NF staff identified strategic and other issues for possible consideration in forest plan revision.<sup>5</sup> Three of these issues are mandated by the National Forest Management Act (NFMA). Other strategic and non-strategic topics are also identified.

The three mandated issues identified are the following:

- Restore the ecological functioning of fire adapted ecosystems.
  - Burning will create more frequent smoke days that may aggravate existing health problems for some people.
  - Open forest landscape will result in visual changes, potential effects on wildlife habitat, and easier access for cross-country motorized travel.
  - There may be disputes about how many trees of which size need to be removed to restore ecosystem functionality in a fire-adapted ecosystem; and, differing public assessments of the role of the timber industry in the process.
  - Interactions with aspen declines in the Southwestern Region.
  - Some concerns may arise about “type conversion” from woodlands to historic grasslands. There may be a shift to higher elevations of the transition zones between pine and woodlands.
- Suitability evaluations for timber, grazing, recreation, and wildlife habitat (Threatened and Endangered and Management Indicator Species). This includes assessment of existing conditions and historical conditions in relationship to increasing human population and the implications for some uses and values that may be in conflict.
- National Forest Management Act and other regulations require evaluation of suitability for wilderness and wild and scenic river recommendations to Congress.

In addition to these mandated topics the following additional issues were identified:

- Watershed conditions and their interaction with population growth and pressures for attention to water quality and availability.

---

<sup>5</sup> Information about these strategic issues was prepared by planning staff and other personnel of the Coconino National Forest as part of a Region 3 effort to anticipate planning issues. The information presented in this section is a condensation and summary of some of the key points resulting from the identification of strategic issues in that effort.

- Livestock grazing on Coconino NF lands and its interaction with national and community interests about grazing issues.
- Management of cultural resources, sacred sites, and traditional cultural properties.

Non-strategic issues that may not necessarily be addressed by forest plan revision, but which have some relevance include:

- Riparian issues.
- The implications of goshawk habitat needs with forest management.
- The role of natural fires in forest management.
- Shooting policy.
- Recreation residence.
- Emergent recreation uses such rock climbing, mountain biking, and outfitter/guide permits.
- Special forest products.
- Utility corridors and oil and gas leasing.
- Invasive and weed species management.
- OHV use and travel management.
- Integration of Forest Plan amendments.
- Land adjustments.

## Public Perspectives

Public assessments of issues to consider for forest plan revision are discussed in the Results section and are also collated and summarized here for comparison with the agency perspectives described above. Participant desires are in two interacting categories: (1) public interface issues; and (2) specific resource and use issues. A connecting theme in the discussion groups and interviews is a desire for “balance” in resource use and management. “Balance” and how to achieve it in resource use and management appears to be an essential value that will affect how publics evaluate issues and approaches. The following comment captures the desire for balance expressed by diverse participants from communities adjacent to the Coconino NF:

*Humans are consumptive by nature and that applies to the forest as well. We are trying not to let it be out of control. We are trying to maintain it (the forest) as best we can over a long period of time with more humans and more needs. We are trying to manage that and find the balance. With consumption, there will damage over time, but can we manage it? Can we minimize it? Can we protect the forest so that a hundred years from now we don't have to go get a special pass to go see the forest or this wilderness that has one tree left? It is managing over a long period of time the harm that comes from more people, more vehicles, and more footprints? We need to find the balance in managing and using these resources using a long-term approach.*

Another participant made a similar observation:

*We are so lucky here to have all the federal land that we have. We need to make sure we are protecting it. ... You have the freedom to go into an area and enjoy it. ... We can be in the forest in twenty minutes and have a picnic or go birding or ride a bike. ... It is not polluted and if we keep an eye on it and maintain the delicate balance, then we have a future for our forests.*

These comments also suggest that like beauty, “balance” is in the eye of the beholder. Clarifying the substance of what constitutes balance and how it can be achieved will be part of the work of publics concerned about the management and resources of the Coconino National Forest.

## **Public Interface**

Although public interface issues are not addressed by Forest Plan revision, these issues affect expectations and interactions between interested publics and Coconino NF personnel. These issues directly contribute to the planning environment and the potential for collaborative working relationships to develop a vision and identification of strategic issues for plan revision.

## **Accountability**

Accountability accompanies balance as one of the key expectations to address in forest plan revision. Accountability is another topic that has different meanings for different participants. Some desire measurable standards and guidelines that provide a means to assess if planning goals and objectives are being achieved. Dialogue with stakeholders and interested publics about Plan revision topics is likely to include questions about not only what are the strategic objectives, but also how managers and publics will know if those goals are being met. Although stakeholders recognize that recent Forest Service planning rules do not require standards and guidelines, there is nonetheless an expectation these will be established as an important monitoring tool. Other stakeholders perceive past stalemates as resulting from these very types of standards; and, their desire is for accountability, but not standards that will be a “loophole” that can, from their perspective, impede effective management. There is also a middle ground perspective expressed in the following comment about constructing accountability that meets the needs of different stakeholders:

*I would like to see the planning process use standards and guidelines, but not attach it to every square inch of ground. We have D4 management over here and R2 over here and it becomes so site specific that if it is one guys favorite spot or it is mine, then pretty soon it becomes all things to all people and it is a problem. Then, for me to blade a road or put in a cattle guard it will take two to three years. The paperwork is what has become important to the Forest Service. They are broken. The process has become what is important and not the forest. That is what needs to change, but they have to have some accountability built into that.*

## **Attitude**

Publics are aware of the pressures and demands on the agency from conflicting public needs, limited budgets, liability concerns, desires for partnerships, and high expectations for improving forest conditions. However, there is a strongly expressed desire for a more accommodating and welcoming approach from the personnel of the Coconino NF. Concerns about what participants describe as “attitude” are expressed in the following comments:

*I would like to see more accommodation of the needs for organized activities. For example, we tried to get a mountain bike race here. They just told us it was not going to happen. ... Their attitude is all about why we can't do something and not, 'How can we make it happen?' They are our neighbor and we would like to see a friendly neighbor.*

This evaluation of an unwelcoming attitude is also expressed in the following observation:

*There seems to be an attitude that we should look to private lands first to see if we can meet our recreational or whatever needs. The Forest Service prefers you look at those options first and then if those options are not viable, then go talk to the Forest Service. It seems inappropriate to me since it is public land and paid for by tax dollars. Seems there should be more accommodation of use of public lands for the benefit of the public.*

Coexisting with the sentiments expressed in these quotations, there is also praise for individual district personnel and specific individuals in the Supervisor's office. These positive evaluations of communication, working relationships, and public interface issues are also important. However, there is also some concern offered as constructive criticism to develop a more welcoming and neighborly approach to the relationships of publics with forest managers and resources.

### **Collaboration**

Residents in adjacent communities and vested interests outside these communities expressed a desire for collaboration about Forest Plan revision. These desires emphasize the necessity for a "sincere" and meaningful effort that involves stakeholders and interested parties in working with the agency to identify key issues and solutions to resource problems. Developing common ground, establishing trust, and avoiding duplicity are some of the key expectations for collaboration about Plan revision issues. The foundation of these expectations is the belief that meaningful collaboration will entail cooperative efforts between publics and the agency to identify management issues. Some participants also emphasize the need for a transparent, science-based process of planning that provides stakeholders with the information necessary to understand decision making processes and outcomes.

*What we want to see is an open, transparent, data rich process that gives us an understanding of the rationale for the decisions. We want good planning that is rigorous and transparent. On some issues we will need a forum in which stakeholders can negotiate values and identify solutions that everyone can agree on. ... We need to underscore agreement, because we can get agreement on issues and get public buy-in on controversial issues. ... I don't see the money budgeted that is needed for the level of collaboration that it will take. There needs to be upfront planning and analysis and there needs to be the funding to implement effective collaboration.*

Other participants describe a range of desires for collaboration, but the shared sentiment is the desire for a meaningful collaborative effort that will address some key issues that affect users and forest resources:

*These are complex problems and lots of different perspectives and points-of-view. I get very frustrated by it all. I truly think the solution is collaboration. You sit around a table like this and everyone has a different agenda, everyone has something that is important to them, but you try to find common ground.*

*We are hopeful that a collaborative process can work because we have to deal with each other face-to-face. If someone from the outside comes in, we can say that this is what we of the greater Coconino National Forest community think should be done. Then we could stand solid as a community about how we want our forest to function and how we want it to look.*

*It is not an agency only process to solve the multitude of problems that are perceived to exist. The Regional Forester should be at the first meeting and every third meeting. Honor the products of collaboration. I would sure want the process to be blessed by more than the Ranger and more*

*than the Forest Supervisor. FACA (Federal Advisory Committee Act) comes into this but we need to have process that entails representation by local users and groups. We need to talk about the future and provide a forum for different points of view and in some ways buffer the Forest Service from inappropriate outside intervention. We can then talk about what is sustainable and what makes sense. I think that sustainability should be the driving idea.*

However, there is also sentiment that past collaborative efforts indicate the potential for problems:

*The difficulty with collaboration is ... well I have participated in a multi-year process and we went through a series of concessions to the (organization name). We finally produced a document and there was a roll-call vote and every hand in the room went up including the (organization name). We signed it and the next day the (organization name) came out and said they are opposed. ... The biggest issue for collaboration is trust .... I think there is hypocrisy in their agenda and they are conflict specialists. We make our living off the sustained use of that forest. That is critical to us. We care for the land. We add that value to the process. We earned that through our actions in the past. ... Trust is essential for collaboration to work.*

### **Education and Enforcement**

Public assessments of Coconino NF resources being “at-risk” directly contribute to a perceived need to educate users about appropriate behavior. Users and visitors not amenable to educational approaches may need to be subject to fines as a means to address problem behavior. Given the perceived need for attention to education and enforcement, participants suggest partnerships with the agency to develop education efforts and to cultivate land ethics are desirable:

*People have a right to use public lands, but it is also a privilege and with those rights come responsibilities. ... When you go in and have that picnic, you have a responsibility to take care of it for those people who come after you. ... Education is what is needed to promote those values. It is the responsibility of the Forest Service or partnering with other entities to do that.*

### **Greater Good**

A shared desire from a range of stakeholders is for the agency to management resources for “the greater good.” Some perceive this greater good is identified through a process of rigorous science based study and others suggest it is achieved by consideration of local needs in combination with “sound science.” However, there are shared beliefs about the fundamental value of using the “greater good” concept as a foundation for future planning:

*The bottom line is that we may not have a forest in a hundred years unless we do something now. Let's face it ... if we don't have this forest, if it is traded (land exchanges), and it is degraded, and the animals are gone, then we have all lost. The role of the Forest Service is to make sure we don't lose it. They should be looking at the greater good. How you get there may be more difficult to sort out, but the greater good is managing the forest so that it is here!*

*With increased population and increased pressure on public lands, there are things that just don't make sense the way they did in the past. Take grazing as an example. A lot of these lands were just hammered in the past. The Forest Service had a relationship with the ranching industry, and in a lot of places it makes sense, like places where grass grows like it is Kentucky, then it makes a lot of sense. But, when you are in Arizona, the lands are just hammered and in lots of places it does not make sense. So, you have to look at it in a site specific way. Maybe some places you can*

*have a few cows and not damage the landscape. But, in a lot of places, even the Forest Service will say that these places became unhealthy because they were over-grazed. So, you have to do it in a way that you think about the landscape first and not if this guy is going to go out of business. What is best for the landscape right here should be what they do.*

## **Permits**

As noted elsewhere in this document, participants perceive the process of acquiring permits for special-use or other permitted uses as onerous and overly bureaucratic. There is a desire for this process to be more accommodating and for consideration of types of uses that may not necessarily be allowed under the usual permitting process; and these permits may have unexpected benefits. For example,

*There are horn and antler hunters who have to go off-trail. You cannot stay on a trail and hunt antlers. That is a special-use they should accommodate. Maybe it is a permit system; maybe it only is allowable during March when they find the antlers. But those uses are not accommodated by OHV off-trail use. Birdwatchers and others also have a need; the rock hounding folks can't stay on a trail and find rocks. There are some areas they should be allowed to go into. There are a couple covered by retrieval of game and woodcutting ... but there needs to be other uses accommodated. It could eliminate many of the people coming up from out of the city who think they are going to make a ton of money hunting horns and they tear up the forest in the process.*

Concerns about special-use permits as well as the overall permitting process are among the topics that will likely be raised by publics as future planning efforts proceed.

## **Stewardship**

Resources in the multiple-use environment are perceived to be declining at a time when demand is increasing and agency capability to maintain resources is limited. Stakeholders are asking questions about how the Coconino NF will maintain its stewardship responsibility to resources under these conditions. Participants suggest partnerships with community groups and increased use of volunteers as potential solutions for the agency to maintain its stewardship responsibilities. Some participants suggest that if the agency cannot complete its mission, perhaps key functions should be available for contract. For example,

*There is a great desire for stewardship, but stewardship is not free. There needs to be an education process about the costs of this stewardship. Although the Forest Service has well intended programs, but no money or personnel to carry them out, or the process to do so is so constipated, there has to be a way. Maybe there needs to be some outsourcing. There could be a program to grade roads, pick up the trash, reduce fuels, and do things like that. They could save the Forest Service some money. It could cost less than what they are spending now.*

In response, other participants were more skeptical about the potential for the success of these outsourcing:

*The budget of the Coconino for trail maintenance is limited. So, if you wanted to outsource trail maintenance, there just isn't the money to do it. You couldn't even have a monitor to oversee the work of a contractor and that would not be a good thing. There are volunteer groups helping with repairs and cleaning up trash and that is how most of the work gets done. If they don't have the*

*money, they can't outsource. Maybe there are some areas they can outsource, but it seems they don't have the money.*

## **Resource Use and Management**

Participants describe a forest that is rich with resources, but threatened because of perceived poor forest health and increasing use that is under-managed.

## **Aesthetic and Amenity Resources**

Residents adjacent to forest lands recognize the benefits received from nearby resources that enhance the quality of life of individuals and communities. The aesthetics of forest lands, the respite and social benefits, the opportunity to experience quiet, and the variety of recreation and wildlife watching opportunities are valued benefits of forest lands. Participants desire to see consideration of aesthetic and amenity issues in future forest planning efforts, especially in those areas where the interface with forest lands contributes directly to local economies and lifestyles.

## **Ecosystem Benefits and Resource Conservation**

Some participants emphasize the ecological benefits of clean air, clean water, wildlife habitat, and a functioning ecosystem as a priority for forest planning. These participants emphasize the precedence of ecosystem benefits in consideration of management decisions. For example,

*Forests have value as places where there are wildlands and wilderness. These values have precedence over commodity production, especially timber production. Forest resources should be managed to protect and preserve ecosystem conditions rather than managed for commodity production.*

Other participants suggest that ecosystem benefits and commodity production use coexist and may in fact be necessary. Timber industry and grazing participants emphasize their sense of stewardship that they perceive benefits ecosystem functioning:

*When we were logging, we took care of it. We built roads, but we took care in what we did. There is nothing more that I love to see than a healthy forest. We all get something from it. What we did in harvesting timber helped the forest overall and I think it can do that in the future.*

These different perspectives share a concern for overall ecosystem benefits and this is fertile common ground to build on in future collaboration efforts.

Some environmental participants also desire to see an emphasis on resource conservation and giving precedence to issues about biological diversity and species protection.

## **Fire and Forest Health**

Participant statements about forest health indicate shared assessments about the relationship of fire and forest health. As noted elsewhere in this document, forest health is assessed as “poor” or in other terms suggesting conditions are less than desirable. And, these conditions are perceived to result from the connection of drought, tree density, and bark beetle infestations. These conditions are interpreted as presenting the danger of catastrophic fires that can threaten communities and resources. While there are shared understandings about the problems and some

of the effects of these conditions, there is less agreement about the role of prescribed burns and natural fires in controlling fire danger. The following comments indicate some of the diversity of opinion:

*It is a bigger sin to have the whole forest go up because of poor health from bark beetle than it is to have some natural fires burn large areas. I would just as soon make a few mistakes now rather than wait for a catastrophic fire that will destroy everything.*

*They (Forest Service) are doing controlled burns and that has helped. But they are just taking care of it around communities. They are leaving the rest of the forest untouched. That is where God takes care of it. If they had the manpower to go in and take care of it, then it would be different.*

*When they go in and do a controlled burn, it does not solve any of the tree issues, it is just the undergrowth. You still have 800 trees per acre and not eighty. Unless you thin and do some harvesting, then the problem will not go away.*

Given existing conditions, participants are concerned about threats to property from natural fires:

*If there is a natural caused fire, we ought to let it burn. As long as it is not threatening life or private property, then they should just let it burn.*

*If a fire starts in the backcountry, they should watch that fire closely. If Mother Nature gets too carried away, then we should do something about it.*

There is also sentiment that future forest management should incorporate natural fire as a management priority:

*We need to be able to safely accommodate fire at the landscape scale. There will be some places you can't do that because of smoke, proximity to communities, or things like that. So one of the first things we need to do is to understand where we can and can't have fire or the conditions under which we can and can't have fire on the landscape. That will contextualize forest restoration and community protection work and the operational plans for fire management. If we know where we can manage natural fires for resource benefit, then it will inform where we can do forest restoration. Wildland fire use is a high priority and it is linked to the whole restoration discussion. Restoring fire as a natural process is a priority. The restoration discussion has become focused on thinning trees to avert crown fires in Ponderosa pine forests. ... I think a primary issue informing landscape zoning (determining where different uses occur) should be where fires can occur.*

Finally, some participants desire a management emphasis on “forest health” that focuses on sustainable use.

*Tell me what you do with a forest that is over-crowded and every tree in it is less than 14-15 inches. How does cutting a twelve inch tree do anything for that forest? You cannot have a cap that says you can only do this or that. If you want forest health, you manage for forest health. It does not have to be big trees or little trees; it has to be forest health. Whatever makes it sustainable that is what you need, not some arbitrary cap. Forest health should be the driver in what they do. If you manage the forest well, whatever lives in it will live well too, and they will also be sustainable. And, if it does not live well, then maybe it does not belong there in the first*

*place. Managing the forest well is managing it so it will sustain itself. You can't manage it for one use or one species. Things have to work in harmony.*

## **Grazing**

Grazing is a controversial resource topic. Grazing proponents argue that when properly managed and monitored, grazing has ecosystem benefits; and, there are also benefits that accrue to society from the stewardship values ranchers have and exercise for forest resources. Ranchers also perceive there is a science based argument that appropriate grazing is not harmful to forest resources. There are some interests that are ideologically opposed to grazing because it is a commercial use of public lands with limited societal benefits. Other environmental interests desire a demonstration of the benefits perceived by others. The following quotations from participants in different environmental organizations illustrate the desire for demonstration of ecosystem or economic benefits associated with grazing:

*Public lands are for public benefit and not for the benefit of individuals. If you can prove to me that by helping this guy, then you are helping the public, then I would say that is a good idea. But, if it is for one individual rancher rather than the public, then that is a problem. ... I worked on a cattle ranch a while ago and I saw first hand there are ways to graze on private land that you can sustain the economy, but there are things like imported beef, the problem of slaughter houses and just the way the industry is set-up has a larger impact on the economic viability of ranching than does their ability to graze on public land.*

*It is the historical thing, this is what people have been doing for a hundred years and the Forest Service is set-up to do this and they are still doing it. There are going to have to be dramatic changes in how we manage public lands, but we can't change things overnight. If the Forest Service could ensure that ranchers would graze their cattle with land protection and maintaining habitat, that would be great. But, I have seen with my own eyes what happens when you leave these lands in the hands of ranchers and they don't do a good job. They will put salt licks right near ponds and trash the riparian areas. .. You have to look at it from a site-specific perspective and ask, 'Can you graze cattle here effectively without losing the viability of the landscape?' In Arizona and New Mexico there are lots of places you cannot raise cows....*

*If you say that grazing is going to increase the economy of Flagstaff, then that is a powerful argument to say we should have that. But, if it does not benefit any more than one ranching family, if it does not benefit the public, then the Forest Service really needs to consider that.*

In discussions about grazing issues, some of the key issues expressed are:

- What are the societal benefits?
- What are ecosystem costs and benefits?
- What are the site-specific issues for grazing permits?
- How will grazing be monitored to understand its costs and benefits?
- Can voluntary buy-out of grazing permits be incorporated into future Forest Plans?

## **Land Exchanges**

Land exchanges are a topic high on the priority list of management concerns in some communities, especially those such as Sedona and Blue Ridge where land exchanges are

perceived to have direct consequences for community quality of life. The intensity of these concerns is expressed in the following comment:

*Amendment Twelve has a provision that prevents land exchange with land outside the area. We have a strong interest in maintaining that provision .... We are talking full-fledged warfare if that provision is not upheld. We will lay down in front of tractors to stop whatever.....*

In general, participants are asking three types of questions about land exchange issues:

- What are the effects on neighbors and surrounding communities of a proposed land exchange?
- How will land exchanges affect access to Forest Service lands and recreational opportunities?
- What are the values the Forest Service uses to establish a parcel as suitable for land exchange?

A primary concern about land exchanges is how it affects Forest Service neighbors. In communities such as Sedona and Blue Ridge the concern is that land exchanges result in subdivisions that are developed and potentially influence the quality of life and character of local communities. In Flagstaff, land exchanges are perceived as a potential asset for future growth:

*There is some inefficiency in some of the Forest Service lands in the unincorporated areas of the county around Flagstaff. It is worth considering how communities will grow in the future and we need to work with the Forest Service to identify those lands that make the most sense to develop. There is just rampant growth in this area and that growth is from second homes, either investors or Phoenix people who want a second home. So, we are having problems finding homes for our workforce. So, we need to look toward finding areas where development can occur, where lands lend themselves to development. So, there needs to be appropriate consideration of land exchange.*

Another prominent concern is the effects of land exchanges on access to forest resources and the availability of nearby recreation opportunities. For example,

*This is a recreation area and when they do land exchanges and the land is developed, then the next thing you know when you go out hiking, then you can't go there. Our area is getting smaller. These land swaps are making our recreation area smaller. We are heading for the same kind of situation as in Sedona.*

And,

*In the past, Pine Valley was national forest lands. Once the community was built, then there was no more access. So, if you want to access Jacks Canyon, then you have to hike extra miles to get to that area. The access areas need to be identified up-front to ensure public access. Ensuring rights-of-way access is important, so private groups of citizens have had to purchase lots and donate them so access can be ensured. If they do it upfront rather than as an after-thought is important.*

The following comment expresses a concern with the basis for determining land exchanges and if economic or overall forest system values are the decision points:

*All of the developments that have occurred in this area, or nearly all of them, are the result of land swaps with the Forest Service. I am not sure if they were done for the overall good of the forest or the overall economic benefit to the Forest Service of swapping the land. There is virtually no land left to exchange. We want to know what the purpose is of the swaps. Is it for higher and better use or what exactly is the purpose of these land swaps? Are they going to build more houses? If so, then it will commercialize this area, which is what we all moved here to get away from.*

### **Off-Highway Vehicle Travel Plan**

OHV issues are among the most prominent concerns of participants in this project. Participants who are OHV riders perceive their recreational opportunities are at-risk because of the problem behavior of some users. Other users see OHV use as problematic, listing effects such as:

- Contribute to increases in road density.
- Fragments wildlife habitat and disrupts behavior.
- Causes erosion.
- Creates noise that disrupts the experiences of other users.
- Contributes to noxious weed problems.
- Air and soil pollution.
- Presents a safety danger to other users from excessive speed.

Participants suggest that addressing OHV issues is a priority and these should be addressed in the context of the Forest Plan revision because they interact with other biological processes and types of uses. Most participants suggest that although OHV use is acceptable in a multiple-use environment, there are some key points for consideration in future planning:

- Develop a plan that places OHV use in the context of other uses and biological issues.
- Consider designated use areas and their interaction with other uses and biological resources. Provide for “challenge” areas that allow technical riders opportunities for use.
- Address the issue of increased road densities caused by off-trail use.
- Consider the effects of OHV technology on use, including the effects of two-stroke engines.
- Consider licensing of OHV use on Forest Service managed lands and the use of licenses to monitor problem behavior and illegal use.
- Provide users with clear maps of areas where OHV activities are permissible.
- Consider the effects of weather on trail use, especially wet weather use of trails by four-wheel drive vehicles.

### **Special Resources and Places**

Special places and designed areas such as wilderness and roadless areas raise specific questions for participants including:

- How will the agency recognize and accommodate the interests of diverse communities with interests in particular places and resources. For example,

*It is a diverse forest and although the concerns of people in Flagstaff overlap with some of our (Sedona) concerns, there are also different issues and will the regional variation be considered when the Plan is revised? For example, Oak Creek Canyon management is*

*very important to us and what they do there for tourism, recreation, water, water management, hiking, and birding. It is an unusual place in this setting. So, it is extremely important to all of the forest and especially to this area. There is a lot of management that needs to go on. Other areas such as Fossil Creek and the archaeological ruins also need special attention. ....*

- What is the agency plan for consideration of roadless areas and for conducting and inventory of roadless areas?
- What are the criteria, biological and social, for consideration of any additional wilderness designations?
- Publics value wildlife as a special Coconino NF resource. How will issues about habitat conservation and habitat destruction be incorporated into Plan revision?

Diverse special places and resources are identified by participants. And, there is a desire to see focused attention on how these resources will be conserved and enhanced in future management efforts.

### **Timber Management**

There are several strong themes in participant comments about concerns for timber management.

- The value of thinning. Some participants distinguish thinning from timber harvesting and suggest thinning has a limited effect on overall forest health because it is not sufficiently reducing forest vegetation. And, thinning provides limited to no economic benefits because the timber is not marketable. Other participants perceive thinning as an essential tool for fire protection and a tool that can provide some economic benefits if priorities are given to developing a use for small diameter timber.
- Timber management is perceived to be “ignored” outside of the urban interface areas, creating a problem for forest health and threatening catastrophic fires that can start in backcountry areas.
- The forest is “rich” in timber resources that are underused. Fire is destroying resources that could provide economic benefits to local communities. Other participants suggest that “big trees” or old growth is a resource in short supply that needs conservation. These participants suggest the necessity to catalog old growth resources for future planning efforts.
- Some participants argue that managing timber resources should be based on the needs of forest health and not the needs for economic benefit from timber harvesting.
- Some participants argue that harvesting timber benefits forest health and also provides broader societal benefit by producing economic jobs and income.
- The infrastructure to manage timber resources is limited to nonexistent and this threatens the capability of managers to effectively manage forest resources.

Timber management evokes most of the traditional arguments about who benefits, how much to use and conserve, and how protecting some resources affects others. Although existing timber harvesting is perceived to be limited, the topic contains many of the similarities and differences in values and beliefs that have created stalemates in the past. Future discussions about timber management are therefore likely to evoke controversy; and, this is a topic where searching for common ground may be productive. Both timber interests and conservation and environmental groups value forest health.

## **Trails and Recreation Resources**

Trails are perceived as a primary recreation resource of the Coconino NF, but some participants believe trails are an under-valued and under-managed resource. These interests, include bikers, hikers, OHV riders, and equestrians express a desire to see trail design, maintenance, and expansion, including designated use trails, trail maps, improved signage, and consideration of the needs of technical riders. Other participants are concerned about the expansion of non-system trails that are infringing on wildlife and creating noxious weed problems. Planning for increased use of trail resources is one of the priority issues expressed by participants.

The other priority recreation issue suggested by participants is unmanaged shooting and the necessity for a shooting range.

## **Wildlife, Species Conservation, and Habitat Fragmentation**

Environmental and conservation groups as well as some community interests expressed a desire for consideration of wildlife issues more prominent in Forest Plan revision topics. Specifically, participants suggest there is a need to consider:

- Conservation of wildlife habitat as a key issue in making land management decisions.
- Consideration for declining species that may not necessarily be “listed” but which are subject to effects from environmental changes and population pressures.
- Attention to how habitat fragmentation is affected by management of other forest resources.

## **Gaps in Agency and Public Priorities**

Coconino NF planning staff has anticipated the majority of the resource and use issues of concern to participants. Although the large topics areas identified by the Coconino NF and discussion group participants overlap, the details about issues, effects, and possible solutions are yet to be discussed. This is a strong foundation to build on for upcoming collaboration efforts. Similarly, some of the public interface issues have also been anticipated, although issues about attitude, collaboration, education, and accountability of concern to publics are likely to influence the details of the collaboration process. Participants in the discussion groups recognize the complexity of the upcoming Forest Plan revision process and they appear ready for meaningful engagement about their values, beliefs, and attitudes concerns forest resources and their use.



# 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.
- Arizona National Forests Socioeconomic Assessment Team. 2005. Socioeconomic Assessment of the Coconino National Forest (Draft). Tucson, AZ: USDA, Forest Service.
- Bernard, H. Russell. 1995. *Research methods in anthropology : qualitative and quantitative approaches*. 2nd ed. Walnut Creek, CA.: AltaMira Press.
- Cvetkovich, George T. , and Patricia L Winter. 2002. Social Trust and the Management of Threatened and Endangered Species: A Study of Communities of Interest and Communities of Place. USDA, Forest Service, Pacific Southwest Research Station.
- Ellen, R. F., and Katsuyoshi Fukui. 1996. *Redefining nature : ecology, culture and domestication*. Oxford, UK ; Washington, D.C.: Berg.
- Emerson, Robert M., Rachel I. Fretz, and Linda L. Shaw. 1995. *Writing ethnographic fieldnotes*. Chicago: University of Chicago Press.
- 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.
- Russell, John. 2005. Personal Communication, Coconino NF Personnel. Sierra Vista, AZ, April 2005.
- Russell, John, and Peggy Adams-Russell. 2005. Values, Attitudes, and Beliefs, about National Forest System Lands: Cibola National Forest  
Albuquerque, NM: Cibola National Forest.
- . 2005. Values, Attitudes, and Beliefs, about National Forest System Lands: Coronado National Forest. Tucson,AZ: Coronado National Forest.
- . 2005. Values, Attitudes, and Beliefs, about National Forest System Lands: Gila National Forest. Silver City, New Mexico: Gila National Forest.
- Sanjek, Roger. 1990. *Fieldnotes : the makings of anthropology*. Ithaca: Cornell University Press.
- Schank, Roger C., and Robert P. Abelson. 1977. *Scripts, plans, goals, and understanding : an inquiry into human knowledge structures*. Hillsdale, N.J.  
New York: L. Erlbaum Associates ;  
distributed by the Halsted Press Division of John Wiley and Sons.
- Shrader-Frechette, K. S., and Earl D. McCoy. 1993. *Method in ecology : strategies for conservation*. Cambridge England ; New York, NY: Cambridge University Press.
- Soul e, Michael E., and Gary Lease. 1995. *Reinventing nature? : responses to postmodern deconstruction*. Washington, D.C.: Island Press.
- Spradley, James P. 1979. *The ethnographic interview*. New York: Holt Rinehart and Winston.

## References

Strauss, Anselm L. 1987. *Qualitative analysis for social scientists*. Cambridge Cambridgeshire ; New York: Cambridge University Press.

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.

Strauss, Claudia, and Naomi Quinn. 1997. *A cognitive theory of cultural meaning*, *Publications of the Society for Psychological Anthropology* ; 9. Cambridge, U.K. ; New York: Cambridge University Press.

# 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 Forest Service 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?