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Values, Attitudes and Beliefs Toward National Forest System Lands: The Carson National Forest

Values, Attitudes and Beliefs Toward National Forest System Lands: The Carson National Forest

Prepared for:

**The Carson National Forest
208 Cruz Alta Road
Taos, NM 87571**

and

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

Submitted by:

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

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

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Executive Summary

The Carson National Forest (NF) occupies approximately 1.4 million acres of land in northern New Mexico. The Carson NF is one of 5 national forests in New Mexico and it ranks 9th in total acreage among the 12 national forests in the Southwestern Region of the National Forest System. There are about 86,193 acres of wilderness in the Carson NF, including Wheeler Peak, Latir Peak, Pecos, and Cruces Basin.

There are 5 northern New Mexico counties that have associations with the Carson NF: Colfax, Mora, Rio Arriba, San Juan, and Taos. Portions of the Carson NF are located within Colfax, Mora, Rio Arriba, and Taos Counties. The 5 project counties have a total population of about 214,000 persons with about 91,000 in Colfax, Mora, Rio Arriba, and Taos Counties. San Juan, to the far west of the Carson NF, has a population of about 122,000 persons based on 2003 population estimates. Other noteworthy characteristics of this socioeconomic environment include the following:

- Taos, San Juan, and Mora Counties each have a higher rate of population increase than the State of New Mexico for the 1990-2000 census period.
- Each of the counties has a heterogeneous population, with Rio Arriba, Mora, Taos, and Colfax Counties having higher percentages of Hispanic populations than the state average.
- Median household income and per capita incomes are lower than the state averages.
- With the exception of Colfax County, poverty rates are higher than the state average.
- The number of farms and the amount of land in farms shows a decrease since the last agricultural census, but the average size of farms is increasing. This suggests a pattern of consolidation in farming/ranching operations in the project area.
- These are primarily rural counties with relatively low population densities and the majority of communities are less than ten thousand persons in size.

Data collection was accomplished by a combination of individual interviews and small group discussions. A listing of topics (included in appendix) guided the interviews and group discussions. The guide topics were used to discuss how participants perceive issues rather than to elicit information in predetermined response categories. A list of potential participants was prepared in consultation with the forest planner, district rangers, and other Carson NF staff. The moderator discussed the list of potential participants with the forest planner to assess geographic and interest group coverage. Approximately 35 persons were identified as potential attendees for 3 sessions. Two sessions were organized for Taos in Taos County and 1 session for El Rito in Rio Arriba County. Native American groups were invited to participate in separate sessions to discuss values and beliefs, consultation expectations, and related cultural issues. Results from the Native American sessions will be reported in a separate document.

Discussion groups and individual interviews resulted in information about several topic areas: The social environment and its relationship to the Carson NF; beliefs and values about the characteristics of the Carson NF; beliefs and values about the uses and resources; public and Agency perspectives on management issues and concerns.

Social Environment

Northern New Mexico is a multi-cultural social environment with Hispanic, Native American, Anglo, as well as other cultural groups living in population centers and rural areas. This multi-cultural environment is expressed in the New Mexico's history, contemporary social institutions,

and values about associations with and use of public lands. The contemporary social environment of this region is a mix of diverse communities ranging from small rural towns to larger rural centers. Hispano and Indian cultures are ubiquitous in these communities, although there is also a strong Anglo presence. Participants describe the traditions and economies of this region as in transition. Communities are more diversified and there is a move toward a more recreation-tourism based economy. There is a perception that despite a “veneer of affluence” associated with the tourist industry; this is an economically disadvantaged area. The land grant history of this region has social, cultural, and economic implications for management of New Mexico’s natural resources, including: the land ethic of traditional users; patterns of traditional use such as wood cutting, grazing, and gathering; and, beliefs about personal ownership of forest lands.

Characterization of the Carson National Forest

Data from the discussion groups and individual interviews contain characterizations of the Carson NF with themes that describe accessibility, current forest conditions, perceptions about community and personal ownership of forest lands, legacy values, and valued resources and habitat.

Resource Values and Beliefs

Participants expressed values and beliefs about the following topics: the importance of water and watersheds in the Carson NF; values about the contemporary and future importance of forest biodiversity; intrinsic values of forest resources; the economic and non-market values of forest resources; quiet as a valued aspect of user experiences within the forest; beliefs about the forest as a reservoir of future biological resources; and, expression of belief about the contemporary and present-day value of wilderness resources.

Social Advantages and Disadvantages

Local residents who live traditional lifestyles or engage in grazing, timber harvesting, and other extractive uses of forest resources perceive they do not have the same influence as environmental groups who have paid staff to attend meetings and file lawsuits to stop implementation of management decisions. Environmental interests perceive their involvement in forest management is part of the participatory democracy traditions of the United States. They believe local interests can affect District Rangers and Forest Supervisors more than many environmental groups. They feel at a political disadvantage at the local level, but acknowledge their success representing what they perceive to be a broader range of interest groups.

Uses of Forest Lands and Resources

Discussion group and interview data indicate participants believe the Carson NF is used primarily for recreation purposes. There are also traditional uses such as firewood gathering, herb and plant gathering, grazing, and family gatherings for recreation purposes. There is some limited commercial use of forest resources, but the recreation uses for hiking, mountain biking, backpacking, horseback riding, off-highway vehicle (OHV) riding, and winter recreation define many of important resources and uses of these lands. Participants values and beliefs about the value of access, problems with ‘bad behavior’ among various types of users; differences in values between local and non-local users; concerns about increasing off-highway vehicle use, and problems with crowded trails, closed trails, and trail maintenance.

Public and Agency Priorities for Management of the Carson National Forest

A comparison of public and Agency perspectives about future management priorities suggests some overlap, especially in some of the major areas for consideration such as fire, grazing, recreation, travel management, collaboration, and coordination with other agencies. The major differences between public and Agency perspectives is in the assessment of Agency interactions with communities and stakeholders, especially regarding new roles for the Forest Service in providing education and information, more effective use of volunteers, outreach to communities and stakeholders about Agency mission and goals, and decision making and planning, and transparency in the process of formulating plans and making decisions.

Carson National Forest

The Carson National Forest (NF) occupies approximately 1.4 million acres of land in northern New Mexico. The Carson NF is one of 5 national forests in New Mexico and it ranks 9th in total acreage among the 12 national forests in the Southwestern Region of the National Forest System. There are about 86,193 acres of wilderness in the Carson NF, including Wheeler Peak, Latir Peak, Pecos and Cruces Basin. The Columbine-Hondo is a proposed wilderness area. The 100,000 acre Valle Vidal Unit, the Enchanted Circle Scenic Byway, and the nearby Taos Basin, Red River, and Sipapu ski areas are among the other attractions for recreation users and outdoor enthusiasts.

Table 1: Southwestern Region Forests Ranked by Total Area

Southwestern Region	Rank by Size	Gross Acreage	NFS Acreage	Other Acreage
Tonto NF	1	2,969,543	2,872,935	96,608
Gila NF	2	2,797,628	2,708,836	88,792
Apache-Sitgreaves NF	5	2,761,386	2,632,018	129,368
Cibola NF	3	2,103,528	1,631,266	472,262
Coconino NF	4	2,013,960	1,855,679	158,281
Carson 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 website http://www.fs.fed.us/land/staff/lar/LAR04/table3_r3.htm

There are six ranger districts with the Carson NF:

- Camino Real Ranger District, Penasco, NM
- Canjilon Ranger District, Canjilon, NM
- El Rito Ranger District, El Rito, NM
- Jicarilla Ranger District, Bloomfield, NM
- Questa Ranger District, Questa, NM
- Tres Piedras Ranger District, Tres Piedras, NM

There are 5 northern New Mexico counties that have associations with the Carson NF: Colfax, Mora, Rio Arriba, San Juan, and Taos. Portions of the Carson NF are located within Colfax, Mora, Rio Arriba, and Taos counties. Population centers in this region include Espanola (9,758), Chama (1,175), Taos (5,008), Questa (1,927), and Raton (7,186). Santa Fe (68,650) is not immediately adjacent to the Carson NF, but this is a major population center in this region of New Mexico that provides users for the Carson NF as well as other New Mexico national forests. Similarly, Farmington (41,554) in San Juan County is also a regional population center providing users and interested parties for public lands in southern Colorado and northern New Mexico.

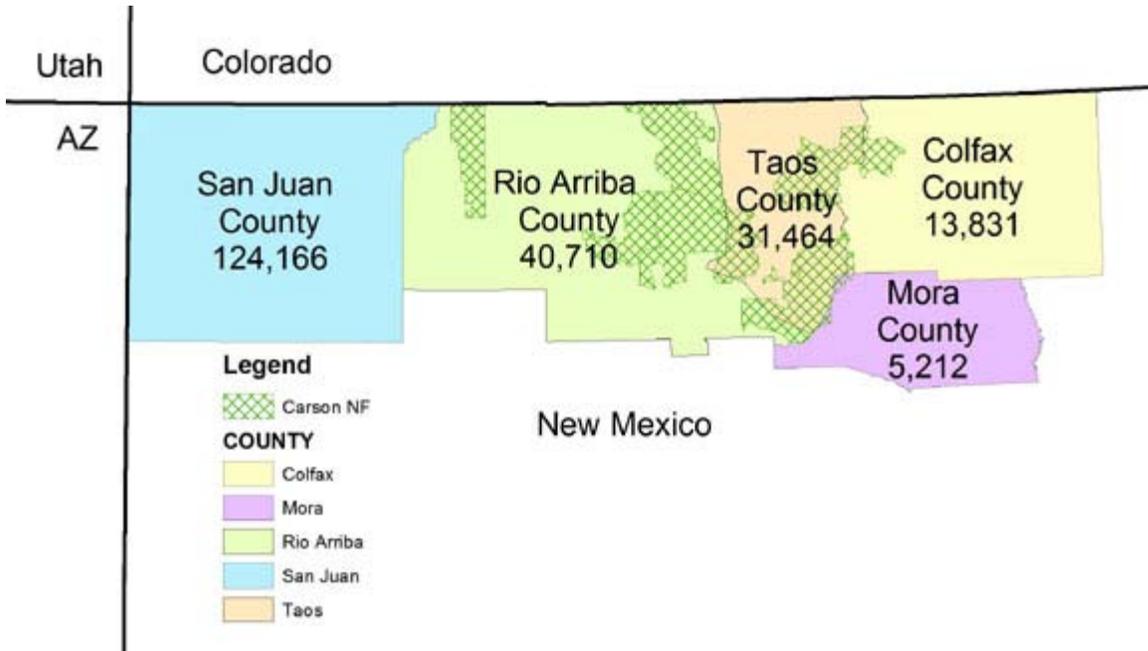


Figure 1. Carson NF Counties

The Socioeconomic Context

The 5 counties associated with the Carson National Forest have a total land area of about 12,397,440 acres of which approximately 2,022,741 acres are FS managed lands. Rio Arriba County has the largest amount of FS managed lands (1,387,047), followed by Taos County (207,112 acres), and Mora County (99,360). There are approximately 2.8 million acres of Indian lands in these counties, with the majority in San Juan County. Rio Arriba County has 646,932 acres of Indian Lands (Jicarilla Apache) followed by Taos County (62,228 acres). Table 2 and **Error! Reference source not found.** summarize the land ownership by county among the 5 counties associated with the Carson NF.

Table 2: Carson NF County Land Ownership

	BLM	FS	State	Private	Indian	Inland Water	Other	Acres
Colfax	261	10,121	278,189	2,115,011	0	4,500	5,358	2,413,440
Mora	7,561	99,360	81,638	1,052,280	0	2,600	721	1,244,160
Rio Arriba	555,238	1,387,047	108,503	1,041,885	646,932	19,100	6,415	3,765,120
San Juan	1,009,266	0	168,416	210,051	2,110,692	6,300	25,515	3,530,240
Taos	207,112	526,213	97,144	550,723	62,288	1,000	0	1,444,480
Total	1,779,438	2,022,741	733,890	4,969,950	2,819,912	33,500	38,009	12,397,440

Source: New Mexico Association of Counties Web site <http://www.nmcounties.org/main.html>

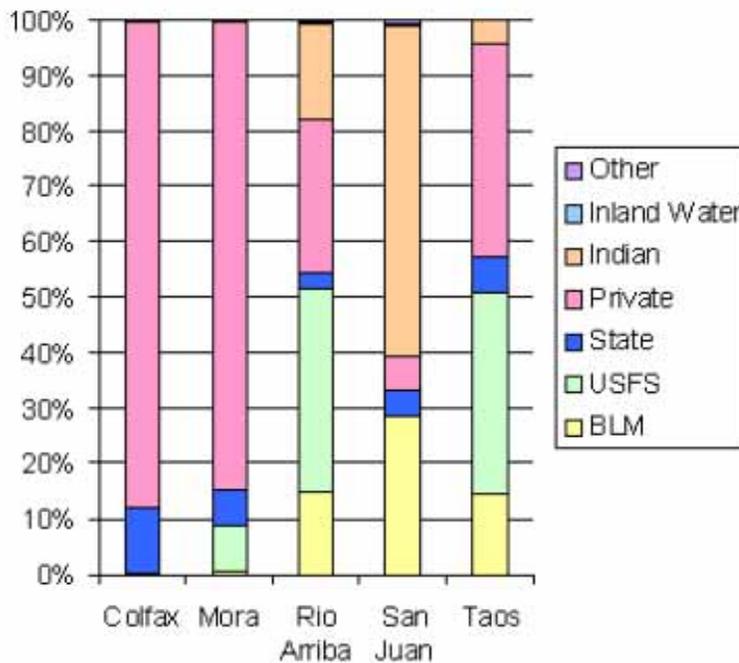


Figure 2. Carson NF County Land Ownership

Some basic demographic data are presented here to orient readers to the distribution and composition of the population among the 5 project area counties. These data are summarized in table 3 and table 4. More extensive demographic and economic analyses are being conducted by

the University of New Mexico Bureau of Business and Economic Research. However, since values and beliefs have a socioeconomic context, this information is intended as a brief summary to add context to the discussion of values and beliefs presented in this document.

The 5 project counties have a total population of about 214,000 persons with about 91,000 in Colfax, Mora, Rio Arriba, and Taos counties. San Juan, to the far west of the Carson NF, has a population of about 122,000 persons based on 2003 population estimates. Other noteworthy characteristics of this socioeconomic environment include the following:

- Taos, San Juan, and Mora counties each have a higher rate of population increase than the state of New Mexico for the 1990-2000 census period.
- Each of the counties has a heterogeneous population, with Rio Arriba, Mora, Taos, and Colfax counties having higher percentages of Hispanic populations than the state average.
- Median household income and per capita incomes are lower than the state averages.
- With the exception of Colfax County, poverty rates are higher than the state average.
- The number of farms and the amount of land in farms shows a decrease since the last agricultural census, but the average size of farms is increasing. This suggests a pattern of consolidation in farming/ranching operations in the project area.
- These are primarily rural counties with relatively low population densities and the majority of communities are less than ten thousand persons in size.

Table 3: Carson NF

People QuickFacts	Carson NF					
	New Mexico	Colfax County, NM	Mora County, NM	Rio Arriba County, NM	San Juan County, NM	Taos County, NM
Population, 2003 estimate	1,874,614	14,051	5,216	40,731	122,272	31,269
Population, percent change, April 1, 2000 to July 1, 2003	3.1%	-1.0%	0.7%	-1.1%	7.40%	4.3%
Population, 2000	1,819,046	14,189	5,180	41,190	113,801	29,979
Population, percent change, 1990 to 2000	20.1%	9.8%	21.5%	19.9%	24.20%	29.7%
Persons under 18 years old, percent, 2000	28.0%	25.1%	26.7%	28.6%	32.60%	24.5%
Persons 65 years old and over, percent, 2000	11.7%	16.9%	15.4%	10.9%	9.10%	12.3%
Median Age	34.6	40.8	39.6	34.5	31	39.5
White persons, percent, 2000	66.8%	81.5%	58.9%	56.6%	52.80%	63.8%
Black or African American persons, percent, 2000	1.9%	0.3%	0.1%	0.3%	0.40%	0.4%
American Indian and Alaska Native persons, percent, 2000	9.5%	1.5%	1.1%	13.9%	36.90%	6.6%
White persons, not of Hispanic/Latino origin, percent, 2000	44.7%	49.9%	16.9%	13.6%	46.50%	33.8%
Persons of Hispanic or Latino origin, percent, 2000	42.1%	47.5%	81.6%	72.9%	15.00%	57.9%
Language other than English spoken at home, pct age 5+, 2000	36.5%	26.6%	68.6%	65.9%	32.70%	52.4%
Median household income, 1999	\$34,133	\$30,744	\$24,518	\$29,429	\$33,762	\$26,762
Per capita money income, 1999	\$17,261	\$16,418	\$12,340	\$14,263	\$14,282	\$16,103
Persons below poverty, percent, 1999	18.4%	14.8%	25.4%	20.3%	21.50%	20.9%
Land area, 2000 (square miles)	121,356	3,757	1,931	5,858	5,514	2,203
Persons per square mile, 2000	15	3.8	2.7	7	20.6	13.6
Agriculture						
Number of Farms 1997 to 2002 % Change	-15.1%	-28.6%	-7.7%	-13.0%	-8.2%	-9.0%
Land in farms (acres, 1997 to 2002) % Change	-3.0%	-1.2%	-4.1%	-1.0%	(D)	50.0%
Average size of farm (acres, 1997 to 2002) % Change	14.4%	38.5%	3.8%	13.9%	(D)	64.9%

Note: (D) Withheld to avoid disclosing data for individual farms.

Source: U.S. Census Bureau 2002 People Quickfacts, 2000 Census and U.S.D.A. 2002 Census of Agriculture

Table 4: Carson NF Study Area Incorporated Places Population 2000 & 2003

Carson NF	2000	2003	% Change
New Mexico	1,819,046	1,878,562	3.3%
Colfax County	14,189	13,938	-1.8%
Angel Fire village	1,048	1,007	-3.9%
Cimarron village	917	909	-0.9%
Eagle Nest village	306	297	-2.9%
Maxwell village	274	271	-1.1%
Raton city	7,282	7,186	-1.3%
Springer town	1,285	1,265	-1.6%
Mora County	5,180	5,257	1.5%
Wagon Mound village	369	359	-2.7%
Rio Arriba County	41,190	40,850	-0.8%
Chama village	1,199	1,175	-2.0%
Espanola city	9,688	9,758	0.7%
San Juan County	113,801	122,457	7.6%
Aztec city	6,378	6,818	6.9%
Bloomfield city	6,417	7,210	12.4%
Farmington city	37,844	41,420	9.4%
Taos County	29,979	31,190	4.0%
Questa village	1,864	1,927	3.4%
Red River town	484	489	1.0%
Taos town	4,700	5,008	6.6%
Taos Ski Valley village	56	56	0.0%

Source: U.S. Census Bureau, Census 2000 and Population Estimates Program 2003

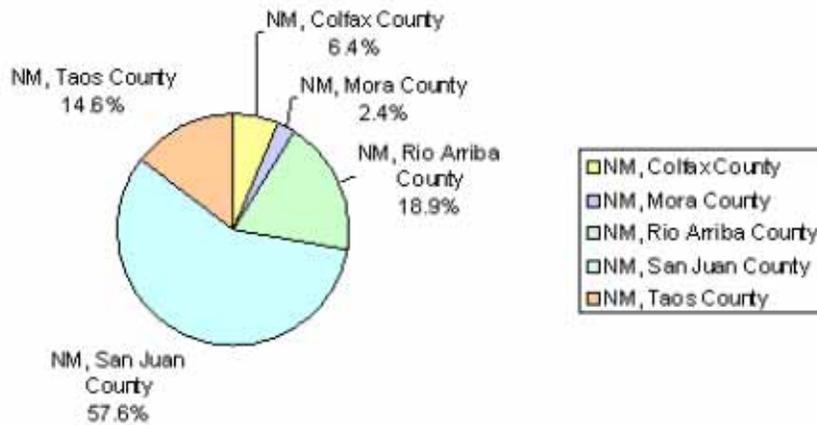


Figure 3. Percentage of Project Area Population by County

Data Collection Process

Data collection was accomplished by a combination of individual interviews and small group discussions. A listing of topics (included in Appendix) guided the interviews and group discussions. The guide topics were used to discuss how participants perceive issues rather than to elicit information in predetermined response categories. This approach is a discovery process to understand issues from a local perspective rather than using predetermined questions (Spradley 1979; Bernard 1995; Schensul, Schensul et al. 1999). Consequently, the guide outlined general topics for discussion, but the interests and issues of concern to participants structured the information discussed. The guide was sent to participants before the sessions so participants would be aware of the topic areas for discussion.

Discussion group sessions were recorded to ensure access to the most detailed information for analysis. Notes were also taken during the groups and key topics were summarized; and, the time mark in the audio recording for these points was noted to facilitate easy access for analysis. Segments within the recordings were identified by topic area and then coded using a combination of predefined and emergent codes. The predefined codes correspond to the topic areas in the discussion guide. The emergent codes were based on topics volunteered by participants. The analysis identified themes in the topic and emergent codes as well as participant statements to illustrate the content of the issues. The results of this qualitative approach (Strauss 1987; Dey 1993; Strauss and Corbin 1998) organize the presentation of results.

A list of potential participants was prepared in consultation with the forest planner, district rangers, and other Carson NF staff. The moderator discussed the list of potential participants with the forest planner to assess geographic and interest group coverage. Native Americans associated with the Carson NF and other forests in this area were invited to separate sessions to discuss concerns specific to Tribal groups, including values and beliefs, consultation expectations, and related cultural issues. The results of these sessions will be reported in a separate document that describes some of the cultural concerns of participating Tribes.

Approximately 35 non-Native American participants were identified as potential attendees for 3 sessions. Two sessions were organized for Taos in Taos County and 1 session for El Rito in Rio Arriba County. The sessions were scheduled for consecutive weekday evenings from 7 to 9 in the evening. Prior to the meetings, the moderator and the Carson NF forest planner and other staff contacted potential participants by telephone to assess interest. Invitation letters were sent to those contacted. One to 2 days prior to each meeting, the participants were contacted to remind them of the date, time, and place of the meeting and to confirm their attendance. The first Taos group was attended by 5 participants representing primarily recreation, local business, and community interests. The second group held in El Rito was attended by 8 persons, whose areas of interest included grazing, traditional land grant use, timber, education, and community interests as well as advocates for wild horses. The third group in Taos was attended by 4 persons representing environmental, off-road vehicle use, community, and watershed interests. Seven additional individual interviews were conducted with individuals representing environmental, recreation, oil and gas development, and timber interests. Written comments were received from 4 persons in the Red River, Questa, and other rural area of Taos County representing equestrian, off-road vehicle, outfitters, and rural resident interests.

Results

Discussion groups and individual interviews resulted in information about several topic areas:

- The social environment and its relationship to the Carson NF.
- Beliefs and values about the characteristics of the Carson NF.
- Beliefs and values about the uses and resources.
- Public and Agency perspectives on management issues and concerns.

Major themes about each of these topic areas are summarized in the following discussion.

Social Environment

Northern New Mexico is a multi-cultural social environment with Hispanic, Native American, Anglo, as well as other cultural groups living in population centers and rural areas. This multi-cultural environment is expressed in the New Mexico's history. The Sandia, Folsom, and Clovis Paleo-Indians had a presence in the southwest starting more than 10,000 years ago; and, the Chocise, Mogolloan, and Anasazi cultures also developed in this area of the southwest (Cordell 1984). The contemporary Apache, Hopi, Navajo, as well as more than 19 Pueblo Native American groups are the decedents of these aboriginal inhabitants. In about 1540 Francisco Vasquez de Coronado explored the Rio Grande Valley in search of the Seven Cities of Cibola. He was initially guided by the Franciscan Friar Marcos de Niza who first heard of Cibola in his 1539 explorations north from Mexico into what is now Arizona (Marco and Baldwin 1926; Bandelier and Rodack 1981). Don Juan De Oñate led some of the first Spanish settlers to the region where they established residence in the Rio Grande Valley in the early 1600s (McGeagh 1990). Spanish settlement of this region continued through the 1700's, despite various conflicts with the Pueblo and other Native Americans, including an important Pueblo revolt in 1680 (Beck 1962; Carlson 1990). After about 1700, the Spanish used land grants to encourage settlement of this region (Beck 1962; Leonard 1970). These grants were of various types, including some "community grants" that allowed grazing, firewood gathering, and other uses by community members (Briggs and Van Ness 1987). After Mexico achieved independence from Spain in 1821, this portion of Spanish territory was ceded to Mexico. Subsequently, the U.S.-Mexican War and the 1848 Treaty of Guadalupe Hidalgo resulted in American control of this region (Tate, United States. et al. 1970). This social history shows a mix of cultures that have a contemporary presence in the counties and communities surrounding the Carson NF. It suggests a diversity of values and beliefs about natural resources and their use.

There are other noteworthy points about this social environment expressed in the discussion group and interview data:

Rural Communities of Different Scale and Ethic Composition

The contemporary social environment of this region is a mix of diverse communities ranging from small rural towns such as Red River (~500), El Rito (~300), and Questa (~1,900) to larger rural centers such as Taos (~5,000) and Espanola (~10,000). Hispano and Indian cultures are ubiquitous in these communities, although there is also a strong Anglo presence. Themes about these communities include the following:

- There is a local saying: The Hispanos have the political power, the Anglos have the money, and the Indians have the land. This comment expresses an assessment of the complexity of the social environment in northern New Mexico. It also supports an

- assessment by some participants that political power within many communities remains with the longer-term and often Hispanic residents. There is a perceived preference for a social and economic status quo among these Hispanic political leaders.
- There is a strong sense of attachment residents have for their communities and social environment. They are willing to make tradeoffs to live in small rural communities surrounded by natural beauty:
Even if you are well-educated, you will make less here. I am willing to put up with poor wages at home in order to live in Taos. ... I know that when I have been gone for a week and I see Taos Mountain, I know I am home... It is a feeling you can't tell someone else about. It is that feeling of being home. It is like that with most of the local population. It is ingrained that this is home.
 - Some participants describe a social environment that has and is experiencing important changes:
Everything is changing, socially economically, income-wise. When I grew up here, and started school, there were only 3 of us who spoke English and the rest spoke Spanish.
For some, this also includes changes in access to forest lands because of social changes:
There is less conflict and more cooperation all the time, but in the last 10 years we have also lost the forest. That is due to environmental lawsuits over the spotted owl. They wouldn't even let us get firewood.
 - Younger people are leaving the area because there are limited employment opportunities. Few young people are able to return to their homes of origin despite a strong sense of attachment.
 - “Newcomers” are perceived to be increasing in numbers, although participants expressed the view that, “We are all newcomers to some degree,” the tenure of residence is an important social distinction. Native Americans and the Hispano peoples are recognized as having more tenure than Anglos. These perceptions imply each group has a different understanding of and association with natural resources based on the tenure of their ancestors in this region.
 - o Some newcomers do not have the same “land ethic” and values about natural resources as do longer-term residents. Similarly, newcomers are believed not to appreciate some of the traditional uses such as grazing since they may complain about “cows on their Kentucky blue grass lawns.”
 - o Retirees who are not dependent on the local economy are perceived to be an increasing component of newcomers.
 - o Participants also describe a group of “young transients” who add to the social diversification of these communities. They are described as “ski bums” or “rafting bums” that enjoy the areas resources:
The faces change, they leave and someone takes their place, but as a group they are part of the social mix in this community.
 - o There is some turn over among newcomers. This is perceived to be related to differences between the expectations about rural living and lifestyles and the realities of rural life. This appears to offer some resistance to the integration of newcomers into existing social networks.

- Rural communities are showing increased civic involvement from residents, which is contributing to more willingness to work together on natural resources issues and concerns. This increased cooperation within some communities is perceived to be bridging social differences and value conflicts within communities.

Transition from Traditional Society and Economy

Participants describe the traditions and economies of this region as in transition. Communities are more diversified and there is a move toward a more recreation-tourism based economy. There is a perception that despite a “vener of affluence” associated with the tourist industry; this is an economically disadvantaged area. Themes associated with this characterization of local society and economies are:

- Communities in this region have traditionally been dependent upon natural resources such as logging, grazing, mining, and only slightly more than two generations ago, this dependency began to change with a dramatic increase in the rate of change in recent decades. Stakeholders were once the ranchers, farmers, and other extractive industries whereas now it is the recreation and tourism industries that are the major stakeholders with interests in forest management.
- There are perceptions of significant socioeconomic differences within local populations:
The people living here now are either the ones who have made their money or they are people who are just scraping by. So, you see people who are doing well and then those who live as they always have.
- The existence of the Vallecitos Federal Sustained Yield Unit established in 1948 is a further expression of the cultural and economic importance of forest resources for residents with traditional land grant values. Although this designation has resulted in a history of contention about the use and management of the Vallecitos Unit (e.g., Forrest 2001), participants believe there is an opportunity in the future for collaboration among all parties to fulfill the original mandates that established the unit while also conserving natural resources.

Traditional Uses and the Land Grant Legacy

The land grant history of this region has social, cultural, and economic implications for management of New Mexico’s natural resources. This is an important topic that has generated an extensive literature that should be consulted for a more detailed understanding of these issues (e.g., Ellis, Dunham et al. 1974; Briggs and Van Ness 1987; Van Ness 1991; Ebright 1994). Land grant issues, especially the traditional uses associated with land grants (cf., Forrest 2001; Raish and McSweeney 2003), were topics volunteered by participants in this projects as a noteworthy characteristic of this social environment. Themes associated with this topic are as follows:

- Land grantees have a long-term relationship with the land that entails a land ethic of caring for resources that support a way of life. Because of social changes such as out-migration, there is some concern young people may not have the same land values as their predecessors
- Important traditional uses of forest lands include grazing, firewood gathering, as well as plant and herb gathering. Forest resources have also been used in the construction of traditional homes, especially the use of small timber for vigas and latillas. These uses

have cultural as well as economic importance for traditional users. These types of uses are also a primary means of interacting with “nature” among Hispano populations. Such uses therefore connect lifestyles, culture, and forest uses in what is perceived as a “traditional” association of communities with natural resources.

- Some traditional uses, especially firewood cutting and grazing, are perceived by some interest groups as contributing to a decline in resource conditions because of their cumulative effects. Some interests argue the Forest Service is “too sensitive” to land grant uses and not concerned enough about the consequences for forest resources:

They (Forest Service) are so sensitive to land grant communities. ... They bend over backwards to appease land grant issues, like with firewood gathering and cutting. They seem afraid to protect the resource.

- The connections of traditional users with forest lands results in a sense of ownership among traditional users that precedes the jurisdiction of the National Forest System. These traditional users rely on their land ethic and beliefs about access to and use of resources rather than FS management plans and directives.

Characterization of the Forest

Data from the discussion groups and individual interviews contain characterizations of the Carson NF with themes that describe accessibility, current forest conditions, perceptions about community and personal ownership of forest lands, legacy values, and valued resources and habitat. Each of these themes is summarized below.

Accessibility

A strong theme in characterizations of the forest is its accessibility to forest users. The most general expression of this theme is expressed in the following quotation:

From downtown Taos, you can drive a half an hour and you can be in a spot where nobody can find you. It doesn't even take that long. It is close enough to where people live that you can take a short drive and be out and away from it all. ... I get home in the evening and we can take a short drive and be in a mountain meadow having a picnic. ... We can get away from the phone and get away from the outside distractions. ... It is so close.

This accessibility is highly valued because it provides recreation for fishermen, hunters, skiers, snowmobilers, and other recreation users. This proximity of a vast expanse of forest that is adjacent to residential areas also provides some users with the opportunity to engage in exploration near to home as expressed by this mountain biking enthusiast:

One trail would just bore the hell out of me. I spend sometimes 4 hours a week just looking for a new trail. I will go up looking for trails and sometimes I am just going down dead-end trails looking for something new. I will find maybe 8 or 9 trails a season. In the winter I will go up and look for old roads or spots that will make a good bike trail. ... I may not ride the same trail the whole summer and I ride 3 or 4 days a week. ... It is the adventure of exploring and finding new trails and destinations.

Individuals who live out of the area have to invest more time to experience the same sense of adventure. However, for those who live adjacent or nearby to forest lands, the accessibility of these public lands for various types of uses is a highly valued characteristic.

Assessments of Forest Conditions

The following themes describe participant assessments of forest conditions:

- The recent drought has stressed vegetation with the Carson NF. Drought is perceived as an important environmental characteristic that establishes a “framework” for understanding existing forest conditions and potential future stressors on forest resources.
- The Carson NF is a “forest under stress.” The cumulative effects of various uses of forest resources including grazing, timber harvesting, and firewood cutting have stressed forest resources. Small changes may thus have unintended affects on forest conditions.
- Forests have high “fuel loads” in some areas putting them at risk for unusually hot fires that may cause unique damages.
- Other participants perceive the Carson NF as having some vulnerable areas that need rest, but most of the forest is perceived to be healthy and resilient. Some feel that forest health can be improved with selective logging:

There are places that could be logged and should be logged. There is a lot of the forest that needs to be thinned. ... There are also some areas that can be logged. ... This one place, you could start at one end and cut trees and when you are finished, start where you began and there would be merchantable timber to cut. It is that healthy.

Participants value a healthy forest and desire improved conditions for vegetation, watersheds, and wildlife habitat. However, the effects of drought and the potential for damage to valued watersheds are prominent concerns about contemporary and future forest conditions.

Attachment and Ownership

Participants expressed a strong sense of attachment to the Carson NF and its resources. Traditional users have a particular sense of attachment and ownership based in the traditional uses of natural resources. Other participants express attachment based on their interactions with forest resources. Each of these major themes is summarized in the following bullet list:

- *It is our land.* Traditional users express both attachment and a sense of ownership of forest lands. While it is not unusual for residents living adjacent to public lands to express attachment to “their” national forest (Russell and Downs 1995; Russell and Mundy 2002; Russell and Adams-Russell 2003; Russell and Adams-Russell 2004), traditional users also have a sense of personal ownership based on historical association and land grant traditions. In response to a question about if the forest is perceived as part of their backyard, one traditional user responded:

To some it might seem like a backyard. We live right next to it, we are adjacent to it, but we don't call it a backyard or a playground or anything like that. It is our land. ... It is our history, our future, our culture, and our traditions.

Another participant made a similar observation:

We have strong ties to this land. I was born and raised here, I will be buried here and that has been going on for generations. We make our living off ranching, so it is very, very precious to us. ... We feel this was our land before it was taken away from us.

This quotation expresses not only a sense of attachment and personal ownership, but also the loss of those lands because they were “taken away.”

- *Our family has always gathered firewood. It is a right we have.* Some participants expressed a sense of entitlement to the use of forest resources because of traditional ties to these lands and agreements with the Forest Service. One participant suggested his wife had received a document from her family describing their rights to the use of Forest Service managed lands. This participant suggested the document was misplaced long ago, but he nonetheless believed it expressed a sense of entitlement to the use of forest resources for traditional purposes. This may be a widely-shared sentiment based on the cultural history associated with the Vallecitos Sustained Yield Unit as suggested by Wilmsen's recording of similar information:

As I went about interviewing residents of the Vallecitos area during the course of this study I was intrigued by reference to a "contract" or "agreement" between the Forest Service and the local community that many of them made. When I asked interviewees for copies of this agreement, no one was able to produce a copy. Although I could not verify it, it seemed probable to me that what the people were referring to was the original policy statement for the VFSYU... (Wilmsen 1997:169-170).

Wilmsen goes on to suggest:

Thus, there is local oral history establishing in the minds of local residents that the Forest Service agreed to certain responsibilities to them when it took over management of the newly created national forest lands. ... This oral history also includes the notion that the Forest Service has failed to meet those responsibilities (Wilmsen 1997:171).

This belief may contribute to the perceived rights of traditional users on Forest Service managed lands. It may also explain the observations of non-traditional users that traditional users appear to behave as if: I am going to use it the way I want because I live here.

- Traditional users express a strong sense of attachment to forest lands based on historical ties and uses of forest resources. These users believe their first-hand knowledge and self-interest in management of forest resources results in a culturally based understanding of and attachment to forest lands.

We have lived here for generations and it has supported our family, our way of life. We know it and we know how to care for it.

This type of sentiment integrates historical ties, individual understandings, and cultural beliefs to construct a strong sense of personal attachment to these lands.

- Anglo and other non-traditional users also express strong attachments to forest lands and resources based on personal experiences and values. For example, one written comment submitted for this project describes personal experiences in the Valle Vidal that express a strong sense of appreciation for and attachment to forest lands and resources:

I have returned many times to the Valle Vidal to meditate and be reinvigorated by the silence and the solitude. Nowhere have I felt the profound sense of a greater Power. ... The inspiration I have received during my time in the Valle Vidal is still directly addressed in my life and my work. ...

This statement expresses the inspirational value of the Carson NF and particularly the Valle Vidal. It also suggests strong attachment to forest resources in general as well as to particular places such as the Valle Vidal. Although this statement is particular to the Valle

Vidal, other participants expressed similar sentiments about their favorite and special places.

It is a Legacy

Participants describe the Carson NF as a legacy inherited from their predecessors and should be passed on to the next generation. This is a derivative of the previous bullet points about ownership, but this sentiment expresses the value of the forest as an enduring resource with benefits for a broad range of interest groups. There are 2 components of this theme: (1) forests require care and management so that future generations can benefit from a healthy forest; and, (2) the Carson NF and other national forests are unique resources that provide essential “life support” benefits to humans which must be passed on to future generations. The first theme expresses a utilitarian view of forests and resources that need to be tended; and, when they are tended well, they will provide benefits to future generations. The second theme suggests forests are a necessary legacy for future generations because humans require the environmental, social, and health benefits that derive from the existence of forest resources.

Natural, Aesthetic, and Existence Value

The Carson NF is perceived by participants as having a range of natural and aesthetic resources that are valued by local residents as well as visitors from out of the area. Themes about these resources expressed by participants include the following:

- Participants suggest the scenery and climate of the Carson NF are important assets that are valued by forest users. Out-of-area residents are attracted by the cooler and milder climate of the mountains and forests. In addition, the scenery is believed to attract those from urban areas; and, is also a value that attracts new residents. The scenery is also appreciated by long-term residents:

Sometimes when I have been traveling and come back, I see it differently. I am reminded of what a special beauty this is here in northern New Mexico. When you have been here all your life, it just fades into the background and you tend to forget what a special beauty we are surrounded by every day.

- The resources of the Carson NF create the opportunity to experience serenity:
- It attracts people to visit because of its beauty and opportunities to experience serenity. In the world we live in, we need those opportunities, especially people from the city who are all stressed-out. We see them all the time. They get here and after a few days you can just see the stress melt away. That is why we all need places like this.*

Urban residents are perceived to especially desire these opportunities, but local residents also need a “respite from the modern world” that has benefits for personal well-being.

- The forest offers the expanse for individuals to experience being away from other humans. As one participant observed:
- It is big enough that I can go out on a trail and if I go to the right place, I will never see another person. All I might see is an elk. There aren't many places left where you can get away like that if you want to. That is part of why I live here and why I moved here. I need that in my personal environment and I can find it here.*

This is a similar sentiment to the “respite” benefit noted in the bullet paragraph above. However, this sentiment expresses the particular benefits of solitude that are offered by the expanse of the forest. A mountain biking enthusiast expressed a similar assessment of the value of the opportunity for solitude offered by the Carson NF:

I rode the South Boundary Trail on Sunday. It is our most popular trail and I had it all to myself. ... It is a critical value of this forest. People come here because they know they can be out on our trails and not see anybody. ... Ninety percent of the forest in this area is like that. There are heavily used areas, but you can get away if you want.

Thus, although there are heavily used areas of the forest, the majority of the forest is perceived to offer solitude valued by most users.

- Wildlife resources, especially elk and large game, are perceived to add to the quality of the forest. One recreational user of the forest made the following observation about the value of wildlife as a forest resource:

There is plenty of wildlife here. In some ways it is a bonus, it adds to the whole experience of the forest. It lets you know you are in a remote, out of the way place. I have seen bears, and elk, and maybe someone wouldn't think so, but the last time I was out on the forest I saw this red-tailed hawk. I was blown away by it. I just stopped and watched it. It may not be the most exotic bird to some people, but the fact I could just watch, it just blew me away.

Although game adds to the quality of the forest experience, there are also beliefs that it is not one of the primary attractions of the entire forest. There are some special areas where game is abundant:

Game is there and it is important, but wildlife viewing is more important in some areas of the forest than others. There are just not a lot of areas ... where people can go to view game. It is not concentrated. ... People don't come to our area to see game. It is incidental, but that is not why they are there. ... If they want to see game, they would definitely be going to Valle Vidal or Latir (Wilderness). People are just here more for the recreation than for the game.

Other participants suggest the forest is a “reservoir” for wildlife that provides some buffer from the effects of population growth and development:

All this growth is putting pressure on the wildlife here and elsewhere. Habitat is decreasing and I feel the national forests are becoming one of the last reservoirs for wildlife. The good lands adjacent to forests are taken up and wildlife is being pushed more and more to depend only on forest lands. Wildlife is getting squeezed. I live here because I enjoy wildlife and I want to make sure wildlife has a place in the forest.

Wildlife also has benefits for hunters; and national forest lands are perceived to be essential habitat for big game and other species of interest to hunters.

Resource Values and Beliefs

There are other values and beliefs expressed by participants about particular resources or issues that are summarized in this section. These should be considered as additions to the specific beliefs

and values noted above about the social environment and perceived characteristics of the Carson NF.

Agua es Vida

Diverse participants describe water and forest watersheds as among the most important resources of the Carson NF. Regardless of perspective, participants shared belief about water and watersheds as being among the most valued forest assets. An environmentalist participant described this importance as follows:

The forest is the source of my water and the water for many communities in New Mexico. We have some of the best water in the country and we need to protect it. The forest protects the soils and those soils recharge water. Without those watersheds, our water quality and our water supply are in trouble.

Another ranching participant made a similar observation:

It is priceless. We can't do without it. As we say in Spanish, 'agua es vida.' 'Water is life.' We better take care of our water and our water quality. It is vital. We need to take care of our watersheds because without watersheds and good water we are in trouble. ... Since the watersheds are in the high country and the majority of that is Federally owned, it is essential for them to pay attention to it.

The observation of another native of Taos expressed a similar sentiment:

About 50 percent of the water for the state comes from these watersheds. ... What you see is there is a big difference in some of the streams here. If you look at the stream that comes out of Blue Lake and you look at other streams off Indian lands, then you see a big difference. Any other stream is silted. On Pueblo lands they are not allowing grazing and logging and other types of uses next to their streams. You can go to the Pueblo in the morning and you see the elders getting their water and put it in their pickup truck. You know they are going to drink that water. You just don't fill up your water container out of our streams and drink it. In terms of resources, the water resource is the critical resource for communities and everyone downstream. We have to make sure it comes out as pure as possible. Our aquifers are filled by these mountains, by these watersheds and it comes off the Carson.

Clearly, water is one of the significant resources values by residents of this water limited environment. It is perceived not only as a significant resource, but water quality is also an indicator of overall ecosystem health.

Biodiversity

Some participants believe the diversity of wildlife, vegetation, water, soil, and other resources within the Carson NF are valued for both “intrinsic” reasons as well as their social and economic benefits.

There is a value people place on knowing the spotted owl is out there and the wolf may be out there someday. It is very hard to put a dollar amount on, but it is very important. It is important from a spiritual perspective in that those creatures are God's creation and they have value too ... And, some people just want to have the full compliment of life on the planet and we are not

having undue effects on (that full compliment of life) so we can achieve our lifestyles. .. Then there is the (economic) value of it: What happens if we lose the value to medical research or we lose the value of the Rio Grande Cutthroat trout to fishing. You can place a dollar value on that side of it. ... We are also part of an ecologically functioning planet and the more checks and balances are eroded, the more vulnerable we become. ... There are ecological systems we are affecting that we don't understand ... and we need to understand the consequences ... and preserve the biodiversity we have here.

Biodiversity is believed to offer social and economic values and forests are perceived to be examples of resources that enhance human life as well as providing contemporary and future benefits for human societies in general.

Intrinsic Values

Some participants believe forests have intrinsic value. From this perspective, forests are valued for what they are rather than what they produce. These intrinsic values are ones that exist about forest resources in general as well as about particular places. An expression of the more general intrinsic values is the following quotation from an environmental participant:

Next to my family, I derive meaning in life from visiting the forest. There are people who go to church and to the forest and both offer something they need to keep going in life. In the modern world you need a connection with nature. People stay here because of it. You have to have that balance. Nature heals us on lots of different levels.

This sentiment describes a non-material valuation of forest resources that enhances human experience and provides the means for individuals to transcend everyday experience. As noted previously, some participants also believe these transcendent experiences provide a respite from modern life and the opportunity for restoration of personal well-being.

Some of the traditional users who are long-term family ranchers in northern New Mexico also express the importance of these types of intrinsic values:

I would like to preserve the wildness and openness of the forest. I like to get out in the morning and hear the birds chirping and experience that tranquility in a world that has so much turmoil. I think there are benefits in the solitude, tranquility and openness of the forest and I want to see that preserved. ... You see all these mobile home parks going in and huge mansions going in and we need to preserve the tranquility we have here. I like to go out in the winter when all I can hear is the 'swish' of the cross-country skis and the coyote howling. It is just amazing.

Another traditional user also commented on the intrinsic value of forest resources:

I have a lot of pride in what this land is all about. You can have freedom here, you can watch a bird or ride a horse across a meadow or hear an elk bugle, or see some grouse. Where else can you see this? Wilderness and this type of land is very limited anymore and we need to respect this land big time.

These sentiments are also expressed about particular places such as wilderness areas and other locations within the Carson NF. However, participants expressed strong sentiments about the Valle Vidal area of the forest. This region evoked strong sentiments and sometimes emotional expressions about the non-material benefits offered by this landscape. For example,

This is like Yellowstone. It is almost another-worldly place. It is completely separate from the rest of the country. It is not a wilderness, but it is holy ground for me. For me it should be inviolate, but we all should be able to go there and use it and enjoy what it offers. ... It is one of those places you can go and fish for good trout right near your car and see a herd of 2,000 elk, even bears and turkey. You and your family can enjoy those kinds of resources without having to backpack. It is our Yellowstone. It is a place people enjoy it for what it is. Within two minutes from the road you can hear silence and be in total peace and nature. It is very rare you can do that. It is a place that is almost just like it was five centuries ago, except for the road going through it.

Participants expressed other strong emotional attachments about this particular place because:

Valle Vidal fills needs of all backgrounds that people in this area have. It is a resource all generations in the future should be able to use.

There is a strong perceived need for these types of places and especially this particular type of place. The comparison to Yellowstone suggests the importance of preserving these types of resource for not only local benefit, but also more general benefit to American society that exist because places such as Valle Vidal contribute to the transcendent values in American culture.

Non-Market values

Some participants suggest intrinsic, aesthetic, existence, spiritual, and other “non-economic” values are undervalued characteristics of national forest resources. For example,

There are quality of life types of things. You can take places like Taos or Santa Fe and people come here because of the exquisite beauty of this place and the environment here. Some call this a second paycheck when they move here and take a lower paycheck than they might have somewhere else because of these national forests. They have the backdrop here of this whole basin. This is a form of value that needs to be attached to these national forests.

A range of participants expressed sentiments consistent with some or all of the points in the quotation above. Although some participants suggested some of these non-market values do in fact have economic benefits, they also stated that non-market values should be appreciated for the types of benefits to human society that are not easily measured. For example,

How do you put a dollar value on what I feel when I get to the top of the peak after a long days ride and look out at the sunset? My soul feels good at those times. When I take people up there and they see that, you can almost see the stress melt away from them. In this kind of world, and especially at this time, we need those kinds of places, even if you can't measure its benefits.

Quiet

Participants expressed a general desire for “peaceful” experiences on forest lands while some were specific about the value of “quiet” as a resource that needs management. For example,

I have lived here my whole life. My family is from here and they have been here a very long time. When I was younger, I could go into the forest and only the only sound I would hear is myself walk. I miss that. There are all these industrial noises in the forest now, especially in the winter time. There are places I use to go snowshoeing, but the snowmobiles came in there and now you

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can be miles away and still hear them. I have been driven out of those areas now and when I do go in there, I don't see any wildlife because I think the noise drives them out too. There needs to be room for quiet in the forest too.

This explicit statement about “quiet” as well as other comments about desiring “peaceful” experiences suggests that an important value for some users is the experience of natural sounds and the absence of mechanical and “industrial” sounds on forest lands.

Resource Reservoirs

Some participants suggest the Carson NF and other national forests are important resource reservoirs in an environment in which such resources are both diminishing and under pressure. This perspective perceives forest resources as essential for contributing to the future health of the overall environment as well as for human health:

In the future, we will depend on forests more because of global warming. Our environment is getting more and more stressed and we are going to need forests to help us survive the effects of global warming. The whole planet system is changing and in the future we will really need the restoration potential of the forests.

From this perspective forests can act as a reservoir that can be used in the future to mitigate the effects of other adverse environmental consequences. Entailed in this view is a more “hands-off” approach to forest management that limits the potential to harm the resources in the reservoir.

A related perspective is expressed by a traditional user of forest resources who also perceives forests as reservoirs of future benefit, but with a somewhat different view about contemporary use:

Trees and forests need to be used. It is like a fruit: you pick it when it is ripe, but you don't kill the tree so you can have fruit again in the future. I don't like to see good timber going to waste when it can be used. If you don't use it, then it just falls and rots. What good does it do then? We need these forests for our children and for our way of life. Without them, we lose something in our culture. I want them to be here for daughter's children. We need some diversified management to make that happen.

From this perspective, forests also have future value, but this future value is achieved by active management rather than “hands-off” management.

Wilderness

Participants suggest wilderness is one of the valued characteristics of the Carson NF. Participants believe that wilderness attracts users because of wildlife and its “untouched and pristine” qualities. For example,

People go into the wilderness because of what they are trying to find and what they are trying to get away from. They are looking for a pristine place and they are looking to get away from motorbikes. You can find experiences in wilderness that you cannot find elsewhere.

Other participants suggest there are potential adverse impacts from wilderness designations:

I was in Latir Wilderness a few weeks ago and I ran into a family from Minnesota. I asked them how they found out about it in Minnesota and they found it on the internet. Sometimes when you designate a place as wilderness, then you attract more people to it. If you are trying to protect a place with a wilderness designation, then it may not always be the best thing because it attracts attention.

Participants also contrasted the intensity of use in wilderness areas with other areas of the Carson NF:

There are campgrounds where it is cheek to jowl in the summertime, but you can go into the wilderness and see relatively few people. In most of our wilderness areas you don't have to have a permit like you do in California. There are not that many people. You can go in and camp just about wherever you want when the mood strikes you. You can have a real wilderness experience without a permit. You can go into our wilderness and see lots of wildlife, including elk calving and things like that.

Some participants describe wilderness areas as one of the last potential refuges for those seeking quiet, peaceful experiences. As one participant suggested:

As the population grows and there is more pressure, the other areas of the forest are going to get more heavily used. That is why the wilderness areas are so important. They are the last refuge for people trying to find peace and quiet and have the opportunity to enjoy nature as it is.

Social Advantages and Disadvantages

Some participants expressed the belief they have a social disadvantage in the process of influencing management of forest resources that influence their economic well-being and traditional ways of living. One central theme in these beliefs is expressed in the following quotation:

The environmentalists have paid lobbyists. They have staff they can send to the daytime meetings that I can't attend because I have to work to make a living. We are too busy trying to scrape a living out of what we do have to attend these meeting and keep on top of what is going on. We don't have the financial backing they do to fight the issues so we lose on most of them.

Participants who express this view suggest that forest management now “caters to environmentalists” because they have exercised the most political influence and use the threat of lawsuits to achieve their goals. Traditional users perceive they do not have the same access to political influence and legal actions; and, they have not been able to organize as effectively as environmental organizations. Furthermore, as expressed in the quotation above, environmental organizations are believed to have infrastructure and financial resources that give them an advantage in influencing forest management decisions.

Participants who express a view of being “disadvantaged” in the process of influencing forest management decisions also suggest environmental interests have been active participants in the democratic process that is open to all citizens. However, these interests also suggest that any roadblocks to participation are inherent in the process as it is currently structured, especially regarding:

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Collaboration takes a ton of time and money on everyone's part and that is where the pavement meets the rubber. People like to talk about it, but when it comes down to truly participating, for the amount of time it takes you end up with a small core group of people. The people who go to the meetings on a Saturday and sit down in a room and talk, they tend to be a small group of people who have the time to do it.

Some groups also perceive their organized participation as expressing democratic principles:

The National Forests are the epitome of democracy in our nation. Democracy is about participating. ... (The Forest Service) is managing a public resource ... of importance to this county and they are owned by everyone who pays taxes. We all need to have a say in it, but you can't ask each person what they think about it. ... We have a constituency and we represent them. ... Democracy is not easy. We have learned how to use our nation's laws and we have learned how to participate in this democracy. I would say that (we are disadvantaged in the process): local users have undue influence with the District Rangers and local resource managers. ... I think others have other associations and organizations too that are doing the same thing we are doing: offering a localized voice for a group of people. That is democracy. ... It is hard to hear a single voice in our democracy and you almost have to organize. ... I think the whole idea of undue influence is a misperception. ... We have these strong environmental laws so no one entity is outweighing another.

This statement suggests that rather than being “advantaged” some environmental groups perceive they are acting consistent with democratic traditions by representing those who have an interest but perhaps not the time to express their issues and concerns about resource management. They suggest “democracy is hard” and in order to counter-balance any undue local influence on the Forest Service, it is their responsibility to ensure other views are expressed to decisionmakers.

Uses of Forest Lands and Resources

Participant statements express several themes about the use of forest lands and resources, including assessments of multiple-use, traditional uses, commercial uses, and recreational uses and values. The substance of these themes is summarized in the following subsections.

Multiple-Use

Participants expressed several themes about the multiple-use concept: (1) how “multiple-use” generates conflicts; (2) the dominance of one use type over others in management decisions; (3) the potential for both commercial, recreational, and other uses of forest resources; (4) the incompatibility of certain commercial uses in special places such as Valle Vidal; and (5) the segregation of potentially incompatible recreation uses. Each of these themes is illustrated below with a quotation that describes the substance of the theme.

One participant suggested that conflicts arise from multiple-use when the Forest Service does not properly manage users:

What I have heard other users say, bicyclists, hikers, ATV riders, is that we are all looking for similar experiences. Our mode of transportation is different, but we are looking for similar experiences. Can the forest provide us all with those experiences? I think it can if the management is there and capable of dealing with that and working with different user groups. ... There are so many potentials to increase the uses here and there

is no need for conflict. We can all use it. Multi-use is not a problem. Management is 20 years behind what the use is and that is the multi-use problem. It is not a user problem it is a management problem.

Other participants suggest multiple-use becomes problematic when one type of use takes precedence over others. For example, an environmentalist participant expressed the following assessment of multiple-use:

Because Federal lands are under the Multiple-Use and Sustained Yield Act and these lands are for the public good, in order to meet that, you cannot have one use dominate the others. In the past, timber has dominated other uses. You can still generate economic activity on national forests without timber. ... There are other values such as water quality, air quality, and other ecosystem services have been ignored or given lip service by the Forest Service. ... We would like to see the Forest Service honor those values as well....

Another participant suggested there is a perceived trend toward restricting uses and “closing down” rather than promoting “sustained use:”

I hate to see it closed down. It is not a museum where you need to preserve it and only see it from afar. It is something that can be used and we can all use it in a way that it will be there in the future. I guess you can call that something like ‘sustained use’ rather than just locking it up.

Participants perceive some places as having unique qualities that preclude other types of uses. A consistent theme expressed by participants about Valle Vidal is that it is a “national treasure” with important benefits to local residents, the state, and the nation. These participants argue that the qualities of Valle Vidal as an environment in which multiple-use successfully exists can be undermined by proposed gas development projects:

You can go to the valley and you will see hunters, and fishermen, and ranchers and hikers. They are all getting along. It is a place people have learned to get along and the very nature of the place allows that to happen. I understand when people talk about the spiritual value of the place, because you can have that type of experience there and all users have come to respect one another and their different experiences. But, you have this one type of use, gas development that can destroy the uses of others for a very short-term gain for a few select people. That is what the Forest Service is doing wrong: they are letting the political agenda of a few people in the area drive that decision. They are subverting a national resource for a political agenda. Is that the intent of multiple-use? I don't think so and I don't think Gifford Pinchot would think so either.

- Participants believe segregated use areas are part of the solution to multiple-use conflicts. For example, a mountain biking participant observed:

I think everyone should be able to use the forest. Open it up! But, I tell you, there are some wonderful single track trails where I would hate to see a 4x4 come roaring past me and ruin that trail. In most areas users will segregate themselves where some types of users don't go together, but that needs to be part of the plan: realize that some uses don't belong everywhere in the forest.

Traditional Use

Four themes were identified in the data about traditional uses¹: (1) traditional uses such as firewood gathering, grazing, and plant and herb gathering are important to the way of life and experience of nature among these users; (2) traditional users have been given priority and special treatment by the Forest Service; (3) traditional uses have a cumulative effect that the Forest Service should consider in its management decisions.; and (4) traditional use has resulted in a body of local knowledge and beliefs about forest conditions and health. The substance of these themes is illustrated in the following bullet list.

- Traditional uses especially the gathering of plants and herbs, grazing, and firewood gathering connect users to forest resources. These uses have cultural meaning as well as economic importance for Hispano and other traditional users. Participants believe these types of uses should be respected in forest management decisions and planning. One participant discussed traditional uses as follows:

I grew up here and local people, people who have lived here for a long time, tend to complain because of closure. They can no longer go into the forest the way they used to. Places you once could drive into were restricted to walking into and then finally you couldn't even walk into them. People were angered because they have always accessed those areas for traditional uses.

Traditional uses comes from the fact that forest lands were part of land grants and those lands were open for use by everybody. So, people depended on going up there for their firewood, latias for building houses, for rock for around their houses, grazing for livestock. So, those are among the traditional uses and it was all done at a small scale, it was done for cultural purposes.

- Some participants suggest the Agency has given priority to traditional users to avoid conflicts. These priorities are not necessarily resented by other users, but participants expressing this view believe that all users would benefit from a more balanced view of managing forest resources. For example, one participant suggested:

Most traditional users don't depend on grazing on forest lands or they don't depend on using and selling firewood. Now, I know people use it for cooking and it is important to them because it is part of their way of life. But, it seems the Forest Service gives in to them at the expense of others sometimes. I think the traditional users and all of us would respect the Forest Service if they just did what was right without any favoritism.

- The third theme is a derivative of the above sentiments in its emphasis on the effects of traditional use on forest resources:

I think there are ways to support traditional users economically and otherwise. We recognize they have a long-term tie to the land and we support sustainable uses that have economic benefits for these communities such as fire management, restoration, and thinning projects that can benefit the forest and local communities. We don't support uses that that over time degrade the forest. The Forest Service has not managed firewood gathering and grazing uses well and the long-term effects are not good for the forest. They have resulted in significant environmental impacts on the land. ... In some places

¹ Traditional use and users is an extensive topic that is beyond the scope of this more general work about values and beliefs regarding forest management. Readers should consult works such as Raish (2001), Corral (2002) and Wilmsen (1997) as starting points for understanding traditional uses on the Carson NF.

they are just not respecting the forest and they are cutting old growth and tearing down gates because they think it is their forest. But, it is my forest, too.

- Participants who are also traditional users suggest they have developed local knowledge about forest conditions and resources from their long-term association with the land. This entails a “land ethic” about respect for the land that they contrast with some new residents as well as visitors. For example, 1 ranching participant described this contrast as follows:

The other day I passed a big rig going into (place) and I know they were the only ones back there because I am in that area all the time. When I came through there again a couple of days later, there was this big pile of sewage they had just dumped from their rig. They just dumped their tanks and never thought about it. Things like that just break your heart. My Dad taught me respect for this country and I don't understand it when people come here and do things like that. I am teaching my kids the same way my Dad taught me when we went out riding and getting firewood.

These themes suggest that traditional use is a topic of considerable concern to a range of participants in this work. It highlights beliefs and values about local interests and knowledge that may contrast with the beliefs and values of other users, within and outside the environs of the Carson NF

Commercial Use

Commercial use of forest resources received limited, but focused attention. The limited discussion of commercial uses may be related to those participants who chose to attend the discussion group sessions: more recreational, environmental, and community stakeholders attended meetings than commercial users. Additionally, uses such as grazing and timber harvesting are believed to be “traditional” uses whereas in other areas these uses would be considered commercial. Where commercial use was discussed, it concerned timber harvesting, oil and gas development, and some limited discussion of outfitting and guiding. Some of the data indicate grazing is perceived to be a commercial. However, in other instances it is not clear if grazing is perceived as a commercial or traditional use or some combination thereof. Analysis identified the following themes about commercial uses:

- Participants describe the Carson NF as a forest with overall limited commercial use. As noted in a previous section about the characterization of the Carson NF, it is identified by participants as primarily a recreation forest.
- There are contrasting themes about timber harvesting and thinning. Participants identify timber harvesting as a “commodity” use whereas “thinning” is perceived as restoration work that produces non-merchantable timber. Environmental interests believe that commodity production of timber on southwestern forests is not consistent with ecological conditions; and, that forests have higher “ecosystem services” values (cf., Daily 1997; Heal 1998) that produce more important benefits for a wider range of users. However, northern New Mexico timber producers perceive there is a role for commercial timber harvesting in selected areas of the Carson NF that has important local economic benefits:

The forest is not healthy in lots of places. It needs to be thinned, but thinning does not have any commercial value. You can't sell logs smaller than five inches in diameter. You can get grant money to do thinning, but you can't depend on it to make a living. We just scrape by as it is. There are places on the forest where you can cut logs, trees that are 14

inches and up that if we had a million board feet and a three year window, then we could make a living at it. The forest can support that in some places, not every place but in some places you can do that and local people could make a living in the timber business. I want the forest to be healthy. I want there to be forests for my children. We can cut timber and have healthy forests. These trees are like apples: when the apple is ripe, you pick it and use it. Or do you just let it drop to the ground and rot and produce nothing?

Environmentalists suggest they believe in the need to support local economies, but through the use of non-commodity production activities such as restoration work as exemplified in the Collaborative Forest Restoration Program (CFRP). All participants who commented on the CFRP approach believe it is a successful means of blending ecological values with local economic benefits.

- Some participants suggest that some traditional uses have been converted to commercial uses, especially firewood cutting.

There are many traditional uses that were small scale, culturally based activities that were turned into industrial use like timber. The forest can put up with people going up to get their latias and getting their firewood, but forests here cannot put up with logging operations. This is the wrong place for it. Maybe you can harvest trees like that in the northwest, but NOT here. ... You still have some traditional uses, but some have become commercial operations that do not fit here. You have families trying to survive and then it is affecting everyone. ... There were families that once did firewood cutting and now one person has taken over to make it into a logging operation and creates an environmental impact. So, the Forest Service, rather than dealing with that one issue, closes the whole forest to all users. ... If they had enough personnel they could open up the forest to traditional uses.

Some participants believe the commercialization of traditional uses is problematic:

There are people who have wood cutting permits that use them to cut wood and sell it. They cut rounds and some cut slabs. They are operating as commercial users, but they have personal use permits. They don't have the same regulations and restrictions to follow as commercial users and that creates problems. If you get fifty or sixty guys cutting vigas, the commercial guys have to compete with them and they have more costs because of the regulations. Then there are lots of log poachers too, and that creates another problem for us. So, the pie just gets smaller all the time.

Another participant suggested this distinction between commercial and traditional use is not always clear-cut:

I have neighbors who cut firewood. I am sure they use most of it, but they sell some in Santa Fe too. Is that commercial use? I don't think so. It has always been that way: people use most of what they cut and they sell some of it to make ends meet.

For some participants, there is the belief that the commercialization of traditional uses has adverse ecological effects that have resulted in forest closures. These closures then are believed to have adverse socioeconomic consequences for all traditional users. However, not all participants clearly distinguish selling firewood as a commercial use.

- Grazing is also perceived both as a commercial and a traditional use. Although many grazing operations are small scale, the cumulative effects of many small scale operations is

perceived as problematic by environmental and some other users. These interests believe riparian areas are prone to damage from grazing; and, in an environment where watersheds are critical, commercial grazing can cause excessive damage because of their cumulative effects. Some participants also suggest commercial grazers usually have other employment and therefore do not have an economic dependence on commercial grazing on the Carson NF. The grazing interests participating in this work were all also “traditional users” or residents who have long-term family ties to these lands, usually with some connection to land grant communities. These participants believe grazing is embedded in their way of life and provides an important social and economic benefit to traditional communities and users (cf., Raish and McSweeney 2003). They also suggest grazing has environmental benefits that often go unrecognized:

You never really hear about the good the permittees do. You only hear about the problems. But, we take care of the land and that has a benefit. My father taught me values about caring for the land and I feel my family has done that. We have been here longer than the Forest Service and likely we don't plan on going anywhere. I know the old-timers have the knowledge that they have passed on to us about how to care for the land. That should be recognized and appreciated because we are not going to harm a resource that is our future.

These contrasting perspectives about grazing mix beliefs and values about commercial and traditional uses that suggest a need to fully understand both the economic and socio-cultural aspects of grazing on the Carson NF.

- Participants were adamant that potential development of coalbed methane mining in the Valle Vida is considered an inappropriate and incompatible use of forest resources for at least the following reasons: (1) in other areas where methane gas has been developed, participants believe there is some evidence of groundwater contamination; and, participants believe important watersheds used for grazing, fishing, and other recreational and commercial uses will be compromised by the same type of contamination; (2) the limited energy benefits resulting from the development of the Valle Vidal are outweighed by the ecosystem services benefits of the area; (3) the natural resources of this area are a national treasure that is at risk from a the use for a purpose with limited national and local benefits; (4) development will exclude other users such as Boy Scouts, anglers, and other recreational users, including those relying on outfitters and guides, and deprive them of valued experiences; (5) coalbed methane gas development will require development of roads and result in activity that will disrupt wintering grounds for a valued herd of elk in Valle Vidal; and (6) local economic benefits will be limited while the costs to spiritual, aesthetic, recreational, and other local and national values will be high. An interview with representatives of the oil and gas industry is pending. Until this information can be added to this document, there is some published material expressing views about this type of commercial use in the Valle Vidal. These views include the following points: (1) there is likely to be local economic benefits to communities; (2) coalbed methane gas can be developed without environmental damage or adverse consequences for wildlife; and, (3) access to coalbed methane resources will benefit the nation's economy as well as New Mexico's economy.

Recreation Use

Participants generally characterize the Carson NF as a “recreation forest” rather than a working or commercial use forest. Participants suggest local residents as well as out-of-area visitors value the range of recreational opportunities offered by the Carson NF:

The Carson offers those of us who live here a lot. Recreation is the big thing; there just isn't much commercial use anymore. You can get out into the forest from town very easily. You can hike, bike, fish, hunt, snowshoe, ski, mountain bike, ride your 4x4, just do anything the forest has to offer. We have people coming here from Amarillo and El Paso and Albuquerque to do the same things. They are looking for recreation opportunities and the climate we have here. They are finding things here they don't have where they live. The more they grow, the more we are going to see the pressure for recreation on this forest.

Recreation beliefs and values expressed by participants were grouped into the following categories: access; values differences in local and non-local users; off-highway vehicle use; and, trails and roads.

Access

Participants suggest the forest offers a range of access options:

The forest offers beauty and nature to people. The easier it is to get in and out appeals to certain users. To other users, it does not have to be as easy to get in and out. It appeals to different users. People just love going in and out of the forest.

Another participant observed:

This forest is a huge place. It has places you can get into easily and without a lot of time spent getting to them. There are wilderness areas and other backcountry you can horseback ride or hike into. Then you have Valle Vidal where you can drive into it and see some wild and wonderful county and then you can get off the road easily there and it is like you were someplace the way it was a hundred years ago. That is the beauty of this forest: it offers this range of opportunities to get into it. We need to build on that.

Access restrictions were among the most intensely discussed issues by a range of participants. There are different beliefs about access restrictions. For example, a local business person commented:

A lot of areas are closed right now ... you can't get up to middle fork now except on foot and horseback now. The road has been closed for 2 years ... supposedly for trail maintenance, but no maintenance has been done. Other roads are closed for the same reason. The forest is being under-used because people can't get into it.

A mountain biking participant commented:

I want them to open it up. They are berming off (constructing earth-berms) too much of it. I want to see them create something out there rather than destroying it. We have this wonderful resource out there and we don't have enough access to it because they are closing it down. They seem to have a 'close first and ask questions later' attitude about it. I believe we need to increase access

to the forest and not shut it down, especially with all the pressures we are going to face as population grows.

An outfitter participant commented:

There are a lot more users out there and even though it is a big place, it seems to be shrinking in some places. You can hike up to say Williams Lake in the summer time and there is a crowd. But, you can also go beyond the lake and not see many people. But, our population is growing rapidly. We are not over-run yet. But, there is going to be more and more demand for areas where people can connect with nature and reestablish who they are. It is an invaluable resource we need to protect. Access to it is important, but there is a dual edge character to it.

The paradox of increased access was also noted by some environmental and conservation participants:

We realize that recreation can have impacts too. The more people use it, the more there is the potential for adverse impacts. So, we need to look closely at what type of access is allowed where and those may need to be sorted out on a case by case basis. But, increased recreation is not without its own costs, unless you plan for it and manage it.

Traditional users also express some concern about closures that restrict access to firewood gathering and other traditional uses that also have recreational value from this perspective. For example,

People in our area complain a lot about closure. They complain about not being able to get to areas they used in the past. That has changed significantly. They need to solve some of the problems about access rather than just closing things down. In one instance they were going to close down a trail because it was eroding, so we went in and took care of it and told them about it and it was all okay after that. They were happy we did it. They have an opportunity to move some trails and not just close them. They can do that if they want to and if they get the volunteer support out, they can easily get that done. There is a lot of willing volunteers to do those things.

These diverse perspectives express the importance of access and also the controversy about this issue.

Bad Behavior and Education

Participants describe a growing problem with “bad behavior” including littering, destroying signs and gates, riding bikes and vehicles off-trail, poaching, and a general disrespect for forest resources and other users. This bad behavior is believed to be primarily by recreation users, and recreation users from out of the area. There is some recognition of “bad behavior” and disrespect of forest resources by local users as well. Participants expressed a desire for (1) additional enforcement; (2) education and outreach by the Forest Service and interested parties to provide information to mitigate bad behavior; and (3) signs and other educational materials that would provide the guidance to visitors about expected behavior and uses on Forest Service managed lands. Some participants suggest using campground hosts as a model for how the Agency can meet these expectations for education of forest users regarding appropriate behavior and uses of forest resources.

Local and Non-Local Users

Participants suggest the Carson NF is a recreation destination for out-of-area residents and these visitors are growing with population increases in urban and rural areas of New Mexico, Colorado, and Texas. There are several themes about out-of-area recreational users:

- Participants generally, perceive out-of-area recreational users have less responsible values about forest resources than local residents. For example,

There are the values of the people who grew up here and another set of values among the people who visit here. They come here, they stay a few days or few weeks, but it is not their forest. They don't care what they do. They come, they go, they do their thing and that is it. They don't care if they trash it. They think some little gnome is going to pick it up after they leave. It's a problem.

Other participants also suggest that they believe a majority of the conflicts among users are a result of differences between the values and behaviors of out-of-area users with local users.

- Local business participants, especially those in the outfitting and other tourism businesses, note they believe there is a trend toward increasing expectations about the quality of the recreation experience they desire to have on forest lands. For example,
Tourists expect more now than in the past. They want more activities in the mountains and more well maintained trails. They want more facilities along trails ... and more options to fish, hike, camp, drive jeeps, and mountain bike, horseback riding, and more. ... They want more than they every have and it is going to put pressure on the Forest Service and the rest of us to manage it better.
- They desire/need information and interpretation about the Carson NF to encourage respect for its resources. Participants also suggest that while signage and interpretation for local users is desirable, it is necessary for visitors who do not know the forest and its resources. The absence of this information contributes to the “bad behavior” noted as a concern in the previous sub-section.

Off-Highway Vehicle Use

The interview and discussion group data contains rich and diverse beliefs about off-highway vehicle use on the Carson NF. Three strong themes exist in these data:

- Off-highway vehicle use has become one of the most troublesome uses of the forest because it can infringe on the experiences of other users, especially those seeking quiet and peaceful forest experiences; it can damage sensitive resources, especially meadows and riparian areas; OHV users are believed to be more prone to bad behavior than other types of users; OHV use fragments and adversely affects wildlife habitat; and, there are not enough enforcement resources to address any problems associated with ATV use.
- Off-highway vehicle use can be accommodated within the Carson NF if it properly managed. As one participant suggested:

I find myself seeking out the quiet places in forests, that is what I value and desire to have as an experience when I go to the forest. I do not believe there shouldn't be an opportunity for motorized recreation. It is fine with me as long as there is no habitat

damage, wildlife is not harmed, and water quality is not harmed. It is perfectly fine. For example, the top of U.S. Hill, going east from there is a good place for OHV use, summer motorized use. There is a substantial part that should not be open, but there are areas that can be. There are certain types of uses in certain types of places that just do not go together.

This sentiment indicates the belief OHV use can be accommodated, but it also indicates a preference for segregated use areas.

- A third perspective suggests that OHV use is a reality because it is growing faster than other types of uses. Consequently, this type of use needs to be acknowledged and managed appropriately, including education and information programs for OHV riders. Off-highway vehicle supporters suggest that without effective management, then OHV use is likely to result in ongoing problems for all forest users, including those OHV riders who are responsible. For example,

If there are no areas for people to go, trails that work for OHV riders, then they will just go anywhere they want. That is going to result in more resource damage than opening more and managing more of the forest. If you open the forest for OHV use and you manage it, then the damage can be addressed. But you also have to realize OHV use is not all the same. The four-wheelers need a wider area for use and a bigger percentage of them are unskilled rider, which mean the trails need to be easier. You get more kids in that sort of use than you do on a motorcycle. It takes no skill to ride them.... I ride motorcycles and there is a need for those kinds of riders who want some trails that are exceedingly difficult. ... A 4 foot wide path in the forest for me is not interesting. People who want a challenge are going to try to find that challenge. The Forest Service needs to design use areas that accommodate different levels of use. ... By designating some of it single-track and some for four-wheelers, you can accommodate different types of users. And, rather than close areas, work with the groups that are using them rather than closing them and forcing them into other areas....

In addition to these three major themes, there are other issues in the data that are summarized in the following bullet points that necessarily reduce some of the richness in the information of beliefs and values about OHV use.

- Off-highway vehicle use is perceived to be increasing more than other types of uses on the Carson NF.
- The open space of the Carson NF is attracting out-of-area OHV riders who do not have opportunities for OHV riding near their usually urban locations.
- Off-highway vehicle use is perceived to be negatively affecting the experience of some users who describe it as “industrialized recreation” that is incompatible with the expectations of other forest users. These participants suggest management of OHV use should consider the expectations of other users for peaceful experiences without the intrusion of motorized vehicles.
- Other participants describe off-road vehicle riding as a long-term use of forest resources that can and should be managed. OHV riders perceive a need for trail management that considers the different levels of expertise of OHV users and the different needs of single-track, ATV, and four-wheel drive users.
- Some OHV users desire off-trail experiences. If these opportunities are not available, some OHV users are likely to ride off-trail regardless of the restrictions. One perceived

remedy is to identify “sacrifice areas” where off-trail activity can be concentrated. It is believed this will limit OHV off-trail use.

- Signage and printed information is needed about OHV routes, levels of difficulty, and sensitive areas to decrease abuse by OHV users.
- There are needs to have areas where OHV riding is not allowed so that users who desire to experience quiet can be accommodated. This desire applies to winter as well as summer recreation. Some participants suggest snowmobile riders have machines that have increased in technology, but management of these vehicles is “behind the curve” especially with regard to perceived noise issues.
- Wilderness areas should remain off-limits to all OHV use and some other special areas of the forest may need restrictions also to reduce conflicts with other users.
- There is a need to inventory wildlife habitat in those areas where OHV use exists in order to ensure proper management of the coexistence OHV use and wildlife habitat.

Off-highway vehicle use is a topic that emerged in all interviews and discussions as a concern for individuals, either as supporters, critics, or those trying to find some acceptable compromise.

Trails and Roads

Recreational users who participated in this work were hikers, backpackers, mountain bikers, horseback riders, motorcycle riders, and other types of OHV users. Among these participants, issues about trail and road use and maintenance were important topics. Several themes about trails and roads were identified:

- Given the increased use of forest resources, there is a need for increased trail maintenance. Trails are perceived to be in an increased state of disrepair and this is affecting the quality of recreation experiences and it is also believed to result in closing trails and concentrating uses in other areas.
- There is limited signage and trail marking and there is a perceived need for more and better signage. Participants suggest this will result in an increase in the quality of recreational experiences, especially for out-of-area users.
- There are too few trails in the forest and this is concentrating uses and increasing conflicts among users. This is creating damage to the resource because of the management policies to close trails. As one participant noted, “there are just more and more people using the same trails and it is only going to get worse.” For example, *The Forest Service is going in making earth-berms to block all these roads. That is a totally useless policy. It is pushing the motorized users around that. The four-wheelers are going around that, so it is pushing the motorized vehicles out into other areas. Like Frijoles Canyon, they put these earth-berms in there and it just totally destroyed it. So, it restricts them to certain roads and it concentrates use.*

Another participant suggested:

They need double or triple the miles of trails we have now on the National Forest. What needs to happen is we need an alternating year type deal where “A” trails are only open certain times of year, “B” trails are open certain times of year, “C” trails are open certain times of the year, which means a lot more management dollars, a lot more education and respect, and a plan for these trails. There is really no guide, no plan for these trails. For example, why is the South Boundary Trail there? Because the South

Boundary trail is there, that is the reason. That does not make it a good bicycle trail. One club tried to adopt it so they could use it...

- “Wildcat” trails are a problem within the forest, especially since there are a variety of roads and trails within the forest:

This forest is different than many. It was logged 50 to 80 years ago and there are thousands of roads in this forest. From Taos to Angel Fire and 518 to the Pueblo there are thousands of miles of roads. Now, some of them you can't get on because the Aspen has grown on them, but a lot of them you can get on and ride on an ATV, or horse, or even in some cases bicycles. The Forest Service does not have the ability to close them off. They don't have the ability to stop the people from going in there. They put up earth-berms, but you can blast over those without any problem. So, there are hundreds and hundreds of miles of roads that can be ridden on. They (Forest Service) don't like that. But, there are really only three good trails for hiking and biking and horseback riding in the whole forest, in our area anyway: 121, south boundary trail, and the Elliot Parker. The rest of them are roads that people have found over the years, and people just take off. ... There are just so few really good single track trails, you could cut a little down wood and have a great trail. ... They are not willing to do that, they just say they do not have the resources to do that.

Trail use and OHV use are closely tied in the beliefs and values expressed by participants in this work. This linkage is not surprising given the perceptions of increased use among all users and especially the recent growth of OHV use both on and off-trail.

Management Priorities and Desired Futures: Agency and Public Perspectives

Managers and staff of the Carson NF have identified potential issues for consideration in the process of forest plan revision. The discussion groups for this work also identified participant priorities and desired future regarding management of the Carson NF. This section presents a summary of both Agency and participant priorities for future management of the Carson NF.

Agency Priorities

Agency priorities were identified in an informal process by managers and staff of the Carson NF. These priorities are a preliminary assessment of issues based on this informal process of listing issues by Rangers, other line officers, and planning and resource management staff. The result of this information process identified the following information reformatted from the original results of the Carson NF preliminary issue identification process.

The key preliminary issues we identified on the forest include:

- Restoration of disturbance adapted ecosystems.
- Use of fire on a larger landscape level, including Fire Use.
- Travel Management in the application of providing public access in a safe manner, including a variety of recreation experiences, while protecting other resource values.
- The determination on proposed special management areas, including proposed wilderness, proposed research natural areas, and others.

In addition to these issues there are several areas where as we approach revision additional guidance would be useful in developing our strategy. Perhaps small task teams may be able to develop criteria and provide guidance in the following areas.

- Monitoring requirements at a forest or larger scale.
- Application and development of Scenery Management System as a tool for delineating management areas and identifying objectives for the area.
- Direction pertaining to encumbrances on National Forest System lands, such as, wells, fire stations, landfills, etc. What is the role of the forests within the region and what is the appropriate balance?
- Clarification on how to address rangeland health versus livestock production. Additional direction on when to restock after prolong drought.
- Long-term strategies for dealing with recreation residents on the forest.
- Strategies to approach collaboration in an effective manner.
- Strategies to deal with other planning efforts by other agencies and the State. In particular those efforts dealing with water use and delivery.

Finally there are several areas that will be unique to the Carson NF and as we approach revision we will need to discuss further with the region. One such area is the need to revise our plan in terms of survey protocols for Mexican Spotted Owl. We may have a desire to be different from the rest of the region on this requirement as it may be more productive to complete surveys in our best habitat on the forest versus the project areas.

Public Priorities

Participants in this process expressed diverse beliefs about their contemporary and future management priorities for the Carson NF. These beliefs can be grouped into two categories: (1) issues and concerns pertaining to Agency structure, organization, and management approaches; and (2) issues concerning resource management. The specific issues in each category are summarized in the bullet paragraphs that follow. The detail behind these summary bullets varies considerably. For example, some participants expressed detailed concerns about Forest Service planning rules, working with volunteers, and trail management. Other topics such as Agency mission, noxious weeds, and vandalism were identified as issues, but the details were not as well developed. For consistency in presentation, the bullet paragraphs below identify these management priorities without elaboration of the details of each one.

Priorities and Concerns about Forest Service Structure and Management

- Participants expressed the belief that the mission of the Forest Service, especially on the Carson NF is, at best, not well articulated and at worst, it is perceived not to exist because management is “reactive” and not “proactive.”
- Managers are subject to excessive outside influences, especially in the Supervisor’s Office where the “agenda from Washington” is believed to influence decisions more than the condition of the Carson NF resources.
- It is desirable to have Rangers and managers who have local knowledge and understanding of local traditions. The appointment of Rangers in some Districts with this local knowledge is perceived to be a step toward better understanding of traditional culture and ways of life that can benefit both the Forest Service and local communities.
- The turn over in rangers and forest supervisors is perceived to undermine effective working relationships with community members. Furthermore, there is some belief this policy results in “conservative” management that is not necessarily what is best for the resource or local communities. For example,
People come here, it is a stepping stone and they don’t want to do anything to ruffle feathers or hurt their promotion. They are willing to do nothing. If we can get someone who is willing to work with us then things can get done. But, if they aren’t, then you never get anything done.
- Participants also suggest the need for a management strategy to guide decision making rather than the preferences and opinions of district rangers and forest supervisors who change over time. The need for continuity independent of personality and predisposition is believed to be an important condition for successful forest management.
- Participants suggest that managers are “desk-bound” and may not have first-hand knowledge of forest resources. Knowledge based only on computer-models or secondary sources is perceived to be insufficient to effectively manage forest resources. Similarly, participants suggest a desire for a greater presence of uniformed Forest Service personnel in the forest and interacting with forest users.
- Forest planning and decisionmaking is believed to be too complex, too bureaucratic, and too time consuming. A result is making decisions or postponing decisions that no longer apply to conditions that may have changed once the decision is made.
- Some participants expressed skepticism about the new planning rule and this data collection process as a means to circumvent meaningful public input into forest

- decisionmaking. Participants suggest the new planning rule has the potential to subvert public input and meaningful public involvement.
- Participants also believe there some public input processes are only undertaken as “bureaucratic checkmarks” and not sincere efforts to gather and use public input. Participants emphasized the Valle Vidal as an indicator of the meaningfulness of public input for the present and the future. For example,
If ever there was a no brainer, Valle Vidal is it. They have had local people telling them about this resource and what it means to us and to the nation. If they cave in to outside interests to save their skins, well, it will tell us all something about what public input means. For energy that would only power the nation for eleven hours or so, they are willing to devastate a place that expresses the heart and soul of why we live here. If they can't listen to us on this one, they are just blowing us off. We will see.
 - There is some belief of the need for more and better communication about forest resources, Agency mission, road closures, management decisions, and nearly any aspect of interactions of the Forest Service with local communities.
 - Residents perceive a future role for the Forest Service to act as a “catalyst” to bring diverse interests together to solve conflicts and problems of mutual concern. For example,
There are people who don't agree about how you do certain things in the forest. We are hearing that around the table tonight. We are also hearing that people can work together to solve some of these problems. But, it also takes a management style in the Forest Service to foster some collaboration among people who want to solve these problems. In the future, I would like to see them act as a catalyst to help solve some of these problems. With the right management attitude, they could do that.
 - Participants perceive the Agency has a limited budget and limited personnel resources to respond to declining resource conditions; increased use by a range of users, more needs for information; and, needs for collaborative work with communities and stakeholders. Some participants suggest this indicates the need to look for new approaches to management issues, including more effective use of local volunteers and stakeholders who are willing to contribute to addressing resources of interest to them.
 - Participants expressed a belief in the need for more effective responses to violations of forest management rules and policies; and, illegal activities. Some participants believe that increased enforcement should be accompanied by increased education efforts to inform forest users of rules, regulations, and appropriate behavior.
 - Participants believe there is a need for the Forest Service to conduct more outreach to identify public needs, desires, and expectations about resource management. As one participant observed about this data collection process:
What these meetings are doing is cutting edge. The Forest Service has not reached out to the public to get input. I hope this is not a sham that is required by public law that says you have to do it. I hope this is really being done for a purpose and not just a legislative mandate. ... I hope this is the first of many future steps they are going to take to listen to us and work with us on the future of this place.
 - Participants also expressed a strong belief in the necessity to more effectively organize and work with volunteer resources in adjacent communities. Participants expressed strong beliefs about their willingness to contribute to addressing perceived problems such as trail maintenance, signage issues, and education and interpretation needs. However,

- they also perceive the Agency needs to improve its receptiveness to these desires and to work more effectively with volunteers who are willing to address resource issues of concern to them.
- There is a perceived need for continuing coordination with State agencies, especially the New Mexico Department of Game and Fish. Multiple participants noted the importance of the interaction of the Forest Service with Game and Fish and expressed a desire to see more coordination and more communication about issues of mutual concern.

Priorities and Concerns about Forest Resource and Uses

- Participants identify increased demand for recreation related to population growth as an issue for priority consideration in forest planning. While local growth is an issue, participants also suggest the growth of urban areas that are sources of Carson NF visitors indicates a need to anticipate increased demand. Previously noted concerns about limited Agency resources to respond to this demand appear to amplify this concern.
- Several specific areas of recreation-related concerns were identified as priority issues:
 - o Roads and trails are currently perceived to be concentrating uses, which participants believe causes environmental damage and increases conflicts among different types of users. Access to more trails and roads to disperse use is also believed desirable to improve the overall quality of user recreation experiences.
 - o User created trails need to be curtailed and especially their potential as a path for spreading noxious weeds.
 - o Trail maintenance, the creation of loop trails, and increased signage and trail maps are desired improvements that participants believe will enhance user experiences, prevent future closures, and limit abuse and bad behavior among all users.
 - o Participants desire the Agency to respond to the growth of OHV use on Forest Service managed lands in future planning efforts. One participant suggested the absence of past planning is having adverse consequences for OHV and other users of the Carson NF:

The Agency did not anticipate the amount of OHV use. In 1976 when the OHV Act went into effect there were 3.2 million OHVs then and now there are 35 million. Where is the management? All these people are coming from elsewhere because they don't have anywhere to ride and they get out here and go hog-wild, because they have all this Federal property, our property to ride on.

Participants identify some specific issues for management consideration, including: the volume of use, the characteristics of different types of OHV activity (single-track, ATVs, four-wheel drive), the needs of riders with different experience levels, opportunities for off-trail riding, dedicated OHV areas, OHV exclusion areas, the interactions of OHVs with wildlife, the effects of OHV noise on other users, education programs to mitigate bad behavior, and increased enforcement efforts.

- o Ski area expansions should be carefully considered for their potential environmental and socioeconomic consequences.
- Some participants suggested “user fees” as one approach to fund trail maintenance, signage, and educational materials that are perceived to be fundamental needs for

recreation users. The notion of user fees appears to derive from: (1) perceptions that the Agency has insufficient funding to maintain forest resources in acceptable conditions; (2) the experience of the National Park Service in charging fees; and (3) the fees being charged OHV users that some participants suggest is a model for other types of users who use forest trails and resources. Some of these sentiments are expressed in the following quotation that offers one example of participant concerns about this issue:

I was just over visiting the Tonto NF. They have programs there where they charge people and it goes to education, it goes right back into the resources people are using. Look at the National Park Service. They are also under-funded. They have collected fees and it has worked. Another good example is the BLM campground at Pillar. They have a volunteer group and it is fee for service. The Forest Service is not maintaining the resources here on the Carson, so what are we going to do? We need to manage our properties here. If we can make the Carson NF work for us, then it will benefit everybody else. I don't know what places like Oklahoma or Colorado or somewhere else may decide to do, but we know what we can do here and we should try to make it work.

- Enforcement and education are perceived to be management priorities to address several perceived problems that adversely affect forest resources and user experiences: growing vandalism; litter; off-trail riding by OHV and mountain bike riders; tree and wildlife poaching; and, other violations of rules and laws. Participants generally perceive a need for more education efforts by the Agency to address problem behavior such as littering and vandalism, especially outreach efforts to schools and visitors.
- Watershed protection and water quality are among the most prominent resource concerns of participants. Ensuring the health of riparian areas and water resources was identified by recreation users, traditional users, community and business interests, as well as environmental interests as specific priorities for forest planning efforts. Thinning and firewood efforts should be closely monitored to ensure watersheds and water quality are protected.
- Some participants are concerned about ensuring future grazing management takes into consideration: (1) the interaction of grazing with the needs of wildlife for forage; (2) elimination of predator control related to grazing allotments; and (3) ensuring the needs of traditional users in management of grazing resources.
- Wildlife habitat and wildlife management were also identified as important concerns for future forest planning efforts. Participants suggested several specific of issues as concerns:
 - o Attention to any use or activity that results in fragmentation of wildlife habitat.
 - o Disturbance of wildlife from motorized activity.
 - o Disturbance of elk herds from coalbed methane gas development.
 - o Accommodation of wild horses and their habitat within the management scheme of forest resources. Wild horses on the Carson NF are believed to represent a unique stock of animals descended from horses used by Spanish explorers. Some participants suggest wild horses have been a part of the traditions and festivals of Hispano culture in the region. Advocates for wild horses desire effective management and conservation of this wildlife resource.
 - o Threatened and endangered species need ongoing consideration in management decisions. Some participants expressed the belief that Lynx are now within the

- environs of the Carson NF and management should be considered for this species.
- o Consideration of indicator species such as beavers, squirrels, three-toed woodpeckers, and other animals that are not only Threatened and Endangered species.
 - Participants desire management of fire and especially the reintroduction of fire as part of the natural and historical functioning of northern New Mexico ecosystems. Participants suggest fuel loads are excessively high in some areas, creating the potential for fires that may damage ecosystems and threaten local communities, especially mountain communities such as Red River.
 - o There is a need to use timber harvesting to create fire breaks to protect communities.
 - o Increased use of controlled burns to reduce fuel loads.
 - Participants desire consideration for local businesses, especially for thinning contracts and any other potential opportunities to stimulate local economies and contribute to local tax base. This will also promote the existence of infrastructure to assist with management approaches that may require harvesting timber.
 - Noxious weeds are a growing problem that needs attention. New trails and a variety of recreation users are potentially spreading noxious weeds within the forest. Participants desire the Agency to identify noxious weeds as a priority concern and develop management responses that address their potential impacts. The methods of treatment, especially the use of some chemicals is acknowledged as controversial. Special-use permits for sheep and goats is perceived as one non-chemical approach for the control of noxious weeds.
 - Participants expressed two different themes about Special Designations on the Carson NF. One theme supports the wilderness designation for the Columbine-Hondo Wilderness Study Area. A second theme expresses the belief the Forest Service may use wilderness designations as a means to reduce future forest management costs. That is, some participants suggest the cost to maintain non-wilderness areas of the forest are significantly higher than those for wilderness areas. Consequently, with limited budgets and personnel, the Agency has an incentive to use wilderness designations as a means to reduce overall costs. This is not perceived as a desirable approach since the merits of a landscape for wilderness designation should be considered on ecological, aesthetic, and other resource-based considerations.
 - There are diverse perspectives about management priorities for timber management. Some participants believe there is room for a timber program that can support local economies and maintain the infrastructure for vegetation management. Other participants perceive commodity uses of timber are an unacceptable use of forest resources. All participants appear to acknowledge the need for thinning projects such as those sponsored through the CFRP program. These types of programs are believed to provide both ecological and socioeconomic benefits.
 - With increasing use, security has become an issue in some of the more heavily used areas of the Carson NF. Some participants expressed a desire to see more attention to safety and security issues:

We were going to go over to the Santa Barbara, but the chance of getting your car broken into over there is ninety-nine percent. It is a shame to have this resource and not use it because people are afraid they can't park their car. My wife will not go in there, so she

does not go anymore. I know maybe we can't have more security because of limited resources, but maybe they can use more education and more volunteers to help out what that kind of vandalism.

The Relationships between Public and Agency Perspectives

Public and Agency perspectives do overlap, especially in some of the major areas for consideration such as fire, grazing, recreation, travel management, collaboration, and coordination with other agencies. The major difference between public and Agency perspectives is in the assessment of Agency interactions with communities and stakeholders, especially regarding new roles for the Forest Service in providing education and information, more effective use of volunteers, outreach to communities and stakeholders about Agency mission and goals, and decision making and planning, and transparency in the process of formulating plans and making decisions.

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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?