

San Juan National Forest Land Management Plan Revision Community Study Groups

April 1996-June 1997

Summary Report

May 1997
Revised June 1997

Prepared by:
Office of Community Services
Fort Lewis College
Durango, Colorado 81301

Table of Contents

INTRODUCTION.....	III
PAGOSA DISTRICT PROFILE.....	1
COLUMBINE DISTRICT PROFILE.....	4
DOLORES DISTRICT PROFILE.....	7
TIMBER, VEGETATION, PRESCRIBED FIRE, AND OLD GROWTH.....	10
PAGOSA.....	12
TIMBER, VEGETATION, FIRE, AND OLD GROWTH CONCERNS AND APPROACHES	13
TIMBER, FIRE, AND OLD GROWTH BUILDING BLOCKS.....	14
COLUMBINE.....	16
TIMBER, FIRE, AND OLD GROWTH CONCERNS AND APPROACHES MATRIX.....	17
TIMBER, FIRE, AND OLD GROWTH BUILDING BLOCKS.....	20
DOLORES	22
TIMBER, FIRE, OLD GROWTH CONCERNS AND APPROACHES MATRIX	23
TIMBER, FIRE, AND OLD GROWTH BUILDING BLOCKS.....	25
RECREATION	27
PAGOSA.....	29
RECREATION CONCERNS AND APPROACHES	31
RECREATION BUILDING BLOCKS	33
RECREATION BUILDING BLOCK SUMMARY.....	34
COLUMBINE.....	35
RECREATION CONCERNS AND APPROACHES MATRIX.....	37
RECREATION BUILDING BLOCKS	40
RECREATION BUILDING BLOCK SUMMARY.....	41
DOLORES	42
RECREATION CONCERNS AND APPROACHES MATRIX.....	44
RECREATION BUILDING BLOCKS	47
RECREATION BUILDING BLOCK SUMMARY.....	48
TRAVEL MANAGEMENT.....	49
PAGOSA.....	51

TRAVEL MANAGEMENT CONCERNS AND APPROACHES	52
TRAVEL MANAGEMENT BUILDING BLOCKS.....	53
TRAVEL MANAGEMENT BUILDING BLOCK SUMMARY	54
<i>COLUMBINE</i>	55
TRAVEL MANAGEMENT CONCERNS AND APPROACHES MATRIX.....	56
TRAVEL MANAGEMENT BUILDING BLOCKS.....	58
TRAVEL MANAGEMENT BUILDING BLOCK SUMMARY	59
<i>DOLORES</i>	60
TRAVEL MANAGEMENT CONCERNS AND APPROACHES	61
TRAVEL MANAGEMENT BUILDING BLOCKS.....	63
TRAVEL MANAGEMENT BUILDING BLOCK SUMMARY	64
RANGE	65
<i>PAGOSA</i>	67
RANGE CONCERNS AND APPROACHES MATRIX	68
RANGE BUILDING BLOCKS	69
RANGE BUILDING BLOCK SUMMARY	70
<i>COLUMBINE</i>	71
RANGE CONCERNS AND APPROACHES MATRIX	72
RANGE BUILDING BLOCKS	74
RANGE BUILDING BLOCK SUMMARY	75
<i>DOLORES</i>	76
RANGE CONCERNS AND APPROACHES.....	77
RANGE BUILDING BLOCKS	78
RANGE BUILDING BLOCK SUMMARY	79
WILDLIFE.....	80
<i>PAGOSA</i>	82
WILDLIFE CONCERNS AND APPROACHES MATRIX	83
WILDLIFE BUILDING BLOCKS	85
WILDLIFE BUILDING BLOCK SUMMARY	86
<i>COLUMBINE</i>	87
WILDLIFE CONCERNS AND APPROACHES MATRIX	88
WILDLIFE BUILDING BLOCKS	89
WILDLIFE BUILDING BLOCK SUMMARY	90
<i>DOLORES</i>	91
WILDLIFE CONCERNS AND APPROACHES	92
WILDLIFE BUILDING BLOCKS	93
WILDLIFE BUILDING BLOCK SUMMARY	94
AQUATIC RESOURCES.....	95
<i>PAGOSA</i>	97
AQUATIC RESOURCE CONCERNS AND ISSUES MATRIX	98
AQUATIC RESOURCE BUILDING BLOCKS	99
AQUATIC RESOURCES BUILDING BLOCK SUMMARY.....	99
<i>COLUMBINE</i>	100
AQUATIC RESOURCES CONCERNS AND APPROACHES MATRIX.....	101
AQUATIC RESOURCES BUILDING BLOCKS	102
AQUATIC RESOURCES BUILDING BLOCK SUMMARY.....	103
<i>DOLORES</i>	104
AQUATIC RESOURCES CONCERNS AND APPROACHES	105
AQUATIC RESOURCES BUILDING BLOCKS	106
AQUATIC RESOURCES BUILDING BLOCK SUMMARY.....	106

Introduction

This report of work undertaken by three community study groups as a part the San Juan National Forest Land and Resource Management Plan revision summarizes the major natural resource topics, revision issues, presentations, values, and recommendations of each group— Pagosa, Columbine, and Dolores.

Included in this document you will find the following primary elements:

- a report for each study group;
- a brief physical profile of each of the three San Juan National Forest Ranger Districts;
- a condensed vision statement for each of the three community areas;
- a brief economic profile for the related counties; and
- a description of the Forest Plan revision topics given emphasis by the study groups, including basic information presented on the issues, community-value perspectives, recommendations, and building-block themes that can be utilized to compose Forest Plan alternatives.

Advisory Note

This summary report is based on a series of meetings held from April 1996 to May 1997 with each of the community study groups. As such, it is based on extensive data collected during presentations and break-out exercises held during those meetings. Our purpose here is to focus and organize much of those materials, yet retain an adequate level of detail that accurately portrays the words and messages of all participants.

Obviously, more-detailed information has been gathered, some in map form, which is not presented here. Some of this information is available in other forms. If you need additional documentation, please let the Office of Community Services at Fort Lewis College know at 970/247-7333. If you notice any items that need modification, please let any of the San Juan Forest Plan Revision staff know (970/247-4874).

Future Uses

This summary report will have several on-going roles:

- Reviewed by San Juan National Forest Plan Revision Interdisciplinary Team members, it will be useful as they continue their research analysis and Forest Plan development activities.
- Topic working groups will use components of this report during more in-depth field trips and discussion meetings during summer and fall 1997 than were achieved by the study groups.
- Many of the issue descriptions, concerns, approaches, building blocks, and themes will be utilized, along with further public involvement to help compose a series of management alternatives for the San Juan Forest Plan Revision.

An Expression of Appreciation

The use of community study groups early in the process of forest planning is a new approach to public participation national forest resource management. We believe the study group process has been successful in better describing and focusing the issues, as well as in gathering a wealth of community knowledge and perspectives.

The depth and breadth of understanding gathered during the past year will make a significant and valuable contribution to future management of the San Juan National Forest. To all those who participated in this process, especially the community study group members, your time and contribution are very much appreciated. Thank you for your dedicated participation and your contributions to a worthwhile public endeavor.

— Sam Burns, Director
Office of Community Services
Fort Lewis College ■ Durango, Colorado

**Explanation of the
SJNF Community Study Group Summary Report
revised June 1997**

This edition of the Community Study Group Summary Report includes a number of changes to the original May 1997 edition. You will find that:

- Sections have been re-organized by topic area, such as wildlife, range, etc., while retaining the work of each study group. Individual study group materials are now gathered under a forest management topic area.
- Changes and additions to the building blocks suggested by meeting participants during May 1997 have been included. Each participant was given the opportunity to evaluate and prioritize building block statements prepared by the Office of Community Services. For each topic area, participants were asked to use up to four blue dots to indicate support and two red dots to indicate a lack of support for each building block statement. A summary of that exercise's suggested changes and additions is located in this revised report immediately after the original building block statements.

Keep in mind that the work of the SJNF Plan Revision Community Study Groups is an on-going process. This version of the report, while a synopsis of your contributions to-date, will be utilized by the San Juan National Forest Plan Interdisciplinary Team and the topical working groups, which are continuing community involvement with the Forest Plan begun by the study groups. Just as it helps guide development of Forest Plan revision alternatives through building blocks, values, and matrices, it will serve also to educate the public and will be used as a starting point for additional field research and analysis.

On behalf of the Forest Plan Revision Team, we thank you for your many hours of tireless work.

Sam Burns, Shannon Manfredi, and Tim Richard
Office of Community Services
Fort Lewis College ■ Durango, Colorado

Pagosa District Profile

The Pagosa District is comprised of 664,610 acres on the eastern side of the San Juan National Forest. It is dominated by deep canyons carved by the Piedra and the San Juan Rivers and the majestic grandeur of the Continental Divide. The vegetation tends to have a greater percentage of spruce-fir; the terrain is steeper than the westside and the vistas more alpine. Much of the district is devoted to wilderness use, the Weminuche being the largest wilderness in Colorado.

Historically, the district has played a significant role in timber production and ranching. Today, it is also used heavily for recreation, particularly during fall big-game hunting season. Williams Reservoir is a primary recreation destination, as are many high-mountain lakes and the backcountry of the Piedra Area and the South San Juan Wilderness.

Archuleta County, the predominant social landscape for the Pagosa District, is one of the fastest growing areas in Colorado, which is leading to increased recreation use by local residents and visitors. Close to half of the Pagosa District's acreage lies in four adjacent counties of Conejos, Hinsdale, Mineral, and Rio Grande.

Vision

The Pagosa Region of Southwest Colorado should preserve our values, visions, and community-building activities by sustaining:

- A strong sense of community where all citizens respect each other and sustain our western pioneer and agricultural heritage in small, rural towns and counties that are safe, low in crime, multicultural, socially diverse, self-sufficient, and where growth is sustainable, and where people have a feeling of belonging.
- Healthy landscapes that are respected, preserved and enhanced through strong community ties to the natural setting, healthy watersheds, wildlife habitat, rural agricultural open space, traditional livelihoods, land conservation, sensitive and sound development, and outdoor sports and recreation and are respectful of solitude and private property.
- Opportunities for making a living where local and regional economic development creates a balanced, active economy, based on a diverse range of clean, local industries and sustainable natural resource management that protects agriculture, that is not dominated by tourism, and that offers a wide choice of year-round, full-time jobs, especially for young people, with livable wages and opportunities for all lifestyles and occupations.
- Community services and facilities that ensure low-cost, good-quality, accessible, clean transportation systems; development and construction standards, for equally available and affordable housing; adequate recreational activities and facilities; a full range of health care; schools that prepare students of all levels for the real world; quality child care; parental education; and family-oriented, community-wide events.
- Citizenship where leaders, citizens, agencies, and institutions work together through community volunteerism and active, responsible, and educated participation in problem-solving and decision-making processes related to the community's future; preserve important resources, while protecting freedoms from over-regulation, and while respecting others and maintain a sense of responsibility.

Archuleta County Economic Data

- In the early 20th century, the US Forest Service was established to bring federal management and resource protection to unsettled land at higher elevations. These forest lands played a key role in the growth of the timber and livestock industries.
- Until the 1970s, ranching and timber production, with fewer contributions from mineral production and tourism, dominated the economic base of Archuleta County.
- During the 1970s, two events characterized the forces that would transform the Archuleta County economy: the San Juan Lumber Mill closed in 1978 and the development of what would become Pagosa Lakes began a dramatic expansion of quality-of-life relocation of residential development.
- Forest lands became a strong element in the expansion of tourism, recreation, and quality-of-life growth.
- The population of Archuleta County grew by 34 percent in the 1970s from 2,733 to 3,664.
- During the 1980s, the population growth rate escalated from 34 percent in the 1970s to 46 percent, while growth rates for La Plata County and the region as a whole fell to 17 percent. While the ranching industry continued to play a significant role, it faced increasing pressure from the conversion of grazing land to residential use.

The 1990s can be characterized as a period of continued rapid growth with an additional 31 percent growth between 1990 and 1995. Trends during the 1990s are analyzed in detail in the following sections.

Major Economic Themes

Economic Diversity

- Until the early 70s, the local economy was predominately driven by natural-resource development.
- The emergence of tourism and quality of life relocation in the 1970s added a dimension that diversified and balanced the traditional economy.
- The “quality-of-life boom” of the 1990s has raised concern that traditional natural-resource economies are being displaced resulting in a loss of diversity.

People and the Land

- As the economy has changed so have the land-use patterns that spurred the quality-of-life migration.
- Farms and ranches are being divided.
- The public lands are under increasing pressure as recreational uses expand, raising concerns about displacement of traditional commodity uses, and the crowding of areas that used to provide solitude.
- The “Traditional West” values that are the heritage of local communities are being confronted by “New West” values as communities grow and change.

The Forest Plan Revision

- Concerns about economic diversity are related directly to the multiple use of the national forest which contributes to every sector of the local economy.
- With private lands and forest lands both under increasing pressure for development and use, close cooperation will be required to deal with wildlife, open space, and access to public lands.
- “Traditional West” and “New West” cultural values will need to be reconciled in order to carry the concept of multiple use into the 21st century.

Archuleta County Employment by Sector, 1972-1993

Mining/Energy, Manufacturing, Construction, Services, and Retail

Sector	1972	1977	1982	1987	1992	1993	%Change 1972-93	%Change 1982-93
Energy/Mining	0	41	100	31	24	26	NA	-74%
Manufacturing	217	250	48	59	113	112	-48%	133%
Construction	47	105	218	269	224	224	377%	3%
Services	NA	NA	281	795	881	866	NA	208%

Source: U.S. Bureau of Economic Analysis

Columbine District Profile

The Columbine District was recently formed from two other districts, the Pine and the Animas, in a consolidation of the San Juan Forest from five to three districts. The Columbine lies in the central portion of the forest and comprises approximately 780,000 acres. The Animas, Pine, Florida, and La Plata River Basins are central components of its geological and topographic features.

With the rapid growth of tourism in the Durango area during the last 10 years, the Columbine District has been used increasingly for recreational activities— hiking, camping, mountain biking, fishing, and sightseeing.

Urban interface issues with wildfire and traditional forest uses (hunting, etc.) have also grown. Seventeen campgrounds exist on the Columbine District with most recreational development around Vallecito Reservoir and Haviland Lake. In the Vallecito area, there are several major departure points for the Weminuche Wilderness. Needleton Trailhead, reached by the Durango Silverton Narrow Gauge Railroad, provides another access point to the west side of the Weminuche Wilderness and many of the 14,000-foot peaks surrounding the popular high-mountain meadow Chicago Basin.

The Columbine District provides a range of multiple uses from grazing to a major ski resort at Purgatory, to a roadless Backcountry area used by locals and visitors alike for hiking, biking, and equestrian activities. The district contains a coalbed methane gas-field development in and around the HD Mountains southeast of Bayfield. It also is rich in archaeological resources, especially in the HD Mountains and areas north of Durango (i.e., Falls Creek Archaeological Area).

Vision

The residents of La Plata and San Juan Counties should preserve and integrate values, visions, and activities by sustaining:

- A sense of community and diverse political, social, and cultural interests that are open to ways to help us change when necessary;
- Healthy ecosystems and rural living, by promoting stewardship, directing growth, and preserving productivity, wilderness, air and water quality, wildlife, and recreation;
- Equal opportunities for making a living in a diverse range of ecologically and aesthetically sensitive local industries with year-round employment, livable wages, sustainable economic development, and new methods of natural-resource use and management;
- Quality services and facilities related to infrastructure, telecommunications, affordable, available housing, recreation opportunities, education, and cultural and social interaction; and
- Citizenship where leaders and institutions provide opportunities to participate in a friendly, civic-minded, involved, and responsible community, encouraging volunteerism and greater cultural interaction.

County Economic Data

The 1960s and 70s

- The energy boom collapsed.
- The D&RG “Silverton Train” was reborn as a tourist attraction.
- Purgatory Ski Area was developed.
- The Weminuche Wilderness was designated.
- Fort Lewis College became a four-year institution and moved from Hesperus to Durango.
- Tourism was established as a major dimension of the local economy also spurring “quality-of-life” growth.
- Service and retail economies expanded dramatically and the population of La Plata County grew 43 percent during the decade of the 1970s from 19,199 to 27,424.
- Continued mining, combined with the growth of tourism, stabilized the population of Silverton during the 1970s at about 830 people.

The 1980s

- Growth in the early 1980s stagnated by the middle of the decade as energy and agricultural prices dropped.
- Tourism marketing intensified.
- Bodo Industrial Park was developed and marketed to support the growth of light industry.
- The first San Juan Forest Plan was adopted.
- Population growth in La Plata County dropped to 27 percent for the decade, less than half the rate during the 1970s. San Juan County population dropped by 10 percent despite continued mining.

The 1990s

- Sunnyside, the last operating mine in Silverton, closed in 1991, eliminating the primary source of high-paying wage jobs and resulting in steep population declines. Silverton became almost entirely reliant on tourism for outside dollars to support the local economy.

The 1990s in La Plata County can be characterized as a period of rapid growth as people relocated in search of quality of life. New jobs were created to support the growth in service-industry and home-building opportunities. Trends are analyzed in detail in the following section.

Major Economic Themes

Economic Diversity

- Until the early 1970s the local economy was driven predominately by natural-resource development.
- The emergence of tourism and quality-of-life relocation in the 1970s added a dimension that diversified and balanced the traditional economy.
- The “quality-of-life boom” of the 1990s has raised concern that traditional natural-resource economies are being displaced, resulting in a loss of diversity.

People and the Land

- As the economy has changed, so have the land-use patterns that spurred the quality-of-life migration.
- Farms and ranches are being divided.
- Public lands are under increasing pressure as recreational uses expand, raising concerns about displacement of traditional commodity uses and the crowding of areas that used to provide solitude.
- The “Traditional West” values that are the heritage of local communities are being confronted by “New West” values as communities grow and change.

The Forest Plan Revision

- Concerns about economic diversity are related directly to the multiple use of national forests which contribute in some way to every sector of the local economy.
- With both private and forest lands under increasing pressure for development and use, close cooperation will be required to deal with wildlife, open space, and access to public lands.
- “Traditional West” and “New West” cultural values will need to be reconciled in order to carry the concept of multiple use into the 21st century.

La Plata County Employment by Sector 1972-1993:

Mining/Energy, Manufacturing, Construction, Services and Retail

Sector	1972	1977	1982	1987	1992	1993	% Change 1972-93	% Change 1982-93
Energy/Mining	39	83	156	169	398	357	815%	129%
Manufacturing	455	690	502	571	767	861	89%	72%
Construction	417	893	1,097	1,240	1,720	1,919	360%	75%
Services	2,341	3,362	4,847	5,413	7,284	7,420	217%	53%
Retail Trade	1,634	2,490	3,500	3,541	4,497	4,817	195%	38%

Source: U.S. Bureau of Economic Analysis

San Juan County Employment by Sector 1972-1993:

Mining/Energy, Manufacturing, Construction, Services and Retail

Sector	1972	1977	1982	1987	1992	1993	% Change 1972-93	% Change 1982-93
Energy/Mining	185	272	274	310	0	0	-100%	-100%
Manufacturing	NA	NA	10	29	42	43	NA	330%
Construction	14	10	23	0	5	6	-57%	-74%
Services	24	36	67	56	33	43	79%	-36%
Retail Trade	64	98	125	138	173	216	238%	73%

Source: U.S. Bureau of Economic Analysis

Dolores District Profile

The Dolores District was formed from the consolidation of the Mancos and Dolores Districts, names which also denote the two major river systems that dominate the district's landscape. The combined district comprises 633,313 acres.

Much of the west side of the district is relatively flat, open, and accessible. Currently, livestock grazing is a significant use, consisting of 44 active allotments, four of which are for sheep.

The district is the site of a ponderosa pine forest restoration demonstration known as the Ponderosa Pine Forest Partnership project. This collaborative effort focuses on improving ecological health by thinning small-diameter pine and the following up with management-ignited fire in order to help restore the sites (five sites totaling 500 acres) to pre-1870 reference conditions in which a natural fire regime is reintroduced and maintained.

Located on the southwestern edge of the district, about 10 miles north of Cortez, is McPhee Reservoir, near the site of the old McPhee Mill, which processed millions of board feet of timber in the 1930s. Built as a part of the Bureau of Reclamation Dolores Project, McPhee is operated by the San Juan National Forest and offers a marina, camping, and picnic facilities.

Vision

Montezuma and Dolores County residents should preserve and integrate our values, visions, and community-building activities by sustaining:

- A strong sense of community where all citizens respect and help their neighbors, accept personal differences, and sustain a culturally diverse, rural western way of life, with limited growth, low population and a low crime rate; with individual freedoms; and with a close relationship to the land by sustaining a sense of continuity and permanence.
- Healthy landscapes where we preserve family agriculture and ranching; access to remote areas, traditional, and recreational areas; diversity and abundance in the land, water, and air.
- Opportunities for making a living created by a diverse range of nonpolluting, local industries; renewable economic and natural resources; livable wages; the area's character; the economic realities of development and intercultural interaction with the Ute Mountain Ute Tribe.
- Community services and facilities for: quality child care, parent education, community-wide events; a safe transportation system supporting economic activities that preserve our small-town, rural character; affordable, available, non-sprawling housing; increased outdoor recreation; accessible, affordable health care; a community-minded, experiential education system; and a well-planned telecommunications infrastructure.
- Citizenship and involvement where leaders and institutions cultivate responsible, active citizens to achieve common goals while retaining personal freedoms and little regulation; enhance cross-cultural communication; merge Old West and New West beliefs and values.

County Economic Data

The 1960s and 70s

- The energy boom collapsed.
- Tourism began to grow and people began to move in, seeking quality of life and new economic opportunities in the growing “service economy.”
- Montezuma County’s population grew by 27 percent from 12,952 in 1970 to 16,510 in 1980. The population of Dolores County was steady over the same decade at about 1,650 people.

The 1980s

- The CO2 field was developed in western Montezuma and Dolores Counties.
- McPhee Reservoir development resulted in an additional 35,000 acres of irrigated land and firm water sources for local towns and rural water companies.
- Oil and gas prices declined sharply resulting in an overall contraction of the national, state, and local industry.
- The Anasazi Heritage Center, Crow Canyon School, and the Cortez CU Center established Southwest Colorado as a major center for archeological education.
- The first San Juan Forest Plan was adopted.
- Growth in the early 80s was followed by a bust in the mid-80s limiting growth in Montezuma County to 13 percent, from 16,510 to 18,672 (half of the growth rate of the 1970s). Dolores County lost 9 percent of its population going from 1,658 to 1,504 partly as a result of uranium mine closings in San Miguel County and the general decline in oil field jobs.

The 1990s can be characterized as a period of rapid growth in Montezuma County as people relocated in search of quality of life. New jobs were created to build houses and provide services for the growing population. Dolores County is also beginning to see growth. Trends during the 1990s are analyzed in detail in the following section.

Major Economic Themes

Economic Diversity

- Until the early 1970s the local economy was predominately driven by natural-resource development.
- The emergence of tourism and quality-of-life relocation in the 1970s added a dimension that diversified and balanced the traditional economy.
- The “quality-of-life boom” of the 1990s has raised concern that traditional natural resource economies are being displaced resulting in a loss of diversity.

People and the Land

- As the economy has changed, so have the land-use patterns that spurred the quality-of-life migration.
- Farms and ranches are being divided.
- Public lands are under increasing pressure as recreational uses expand, raising concerns about displacement of traditional commodity uses, and the crowding of areas that used to provide solitude.
- The “Traditional West” values that are the heritage of local communities are being confronted by “New West” values as communities grow and change.

The Forest Plan Revision

- Concerns about economic diversity are related directly to national forest multiple use which contributes to every sector of the local economy.
- With private lands and forest lands both under increasing pressure for development and use, close cooperation will be required to deal with wildlife, open space, and access to public lands.
- “Traditional West” and “New West” cultural values will need to be reconciled in order to carry the concept of multiple use into the 21st Century.

Montezuma County Employment by Sector 1972-1993

Mining/Energy, Manufacturing, Construction, Services, and Retail

Sector	1972	1977	1982	1987	1992	1993	% Change 1972-93	% Change 1982-93
Energy/Mining	87	224	338	252	259	232	167%	-31%
Manufacturing	440	426	296	491	490	524	19%	77%
Construction	483	712	1,167	663	982	1,146	137%	-2%
Services	1,041	958	1,111	1,584	2,096	2,137	105%	92%
Retail Trade	1,012	1,329	1,472	1,456	1,951	2,203	118%	50%

Source: U.S. Bureau of Economic Analysis

Dolores County Employment by Sector 1972-1993

Mining/Energy, Manufacturing, Construction, Services, and Retail

Sector	1972	1977	1982	1987	1992	1993	% Change 1972-93	% Change 1982-93
Energy/Mining	10	28	NA	NA	NA	NA	NA	NA
Manufacturing	NA	NA	14	NA	NA	NA	NA	NA
Construction	NA	15	40	38	40	30	NA	-25%
Services	28	25	35	76	126	128	357%	266%
Retail Trade	67	108	129	92	105	115	72%	-11%

Source: U.S. Bureau of Economic Analysis

Timber, Vegetation, Prescribed Fire, and Old Growth

Issue Definition

The timber management issue addresses how best to manage timber resources in order to maintain or improve the ecological condition of the forest while providing an adequate supply of timber products within the multiple-use policy of the US Forest Service and the direction of Congress. Developing a balance between extraction and conservation values in the context of community and biodiversity needs and perspectives is critical. Trees, and the timber they can produce, need to be seen from a balanced multiple-use and ecological perspective to achieve the mandates of the US Forest Service.

Presentation Summary

Information gathered from nine SJNF test sites reconstructed an ecological history of pre-1870 landscapes. Those conditions form a “reference point” for comparing and evaluating changes in the forest. Composition, structure, function, and disturbance regimes are examined by forest type.

Ponderosa Pine

- Pine forests once were more open than today’s forests as a result of low-intensity fires that rarely killed big trees.
- Fires burned pine landscapes somewhere on average every five to twenty years.
- Fire fighting, grazing, and logging reduced cleansing, natural fires that opened up the landscape and controlled insects and disease. Trees grow more densely now. Stands are at risk. Healthy trees can defend themselves against bugs, but crowded conditions stress them.
- Herbaceous plants lost to competition against trees, oak, and grazing.
- 12-16-inch trees are typical now compared to 27 inches a century ago.
- The forest lacks snags.
- There are 400-year-old trees in unlogged areas. Most trees today germinated after 1900. Regeneration does not occur.
- Uncontrollable wildfire is probable.

Spruce-Fir

- Although less frequent, wildfires in altitudes just below tree line are huge and devastating. The result is a “mosaic.”
- Aspen responds well to fire or logging, regenerating quickly as it clones itself. Where it does not grow, a forest may take centuries to return after wildfire.
- Clear-cuts near timberline often regenerate poorly.
- Clear-cutting is similar to high-elevation fires, but it takes trees, whereas wildfires leave materials and nutrients that aid regeneration and provide for wildlife.
- Eventually there will be a big wildfire in spruce-fir.

Mixed Conifer

- Low- and high-elevation forests blend and compete in mixed conifer.
- Ecologists look at disturbances, composition, and species number and variety to register changes in the forest.

- Pine needs open, sunny mineral soil to sprout, but white fir and Douglas fir need more shade.
- Increase amounts of white fir over time has coincided with fire suppression.
- White fir's low-growing branches often sweep fire into the "crowns" of other trees that are otherwise tolerant of low-intensity ground fires.

Discussion Questions

Overall

1. How can an appropriate balance in the use of management approaches achieved on the San Juan National Forest fairly address the issues, goals, and scientific information presented?
2. In what general landscapes and on what geographic scale and how intensively can management objectives occur?

Timber

1. How should the unroaded suitable timber base be managed?

Fire

1. Where would you favor a natural-fire regime?
2. What may be the risks and costs of implementing a natural-fire regime?
3. How do you feel about doubling or tripling acreage burned some years?
4. Is prescribed fire as a tool to reduce wildfire risks near urban areas acceptable?
5. Are you willing to accept smoke from managed fires for a short time?
6. Would you like to know more about landscape-scale prescribed fire?

Old Growth

1. What kinds of attributes do you think of as an old-growth forest?
2. Where should old growth not be harvested? Why?
3. Should old growth be managed?
4. Can old growth be enhanced by harvesting?
5. What are biological and social values of old growth?

Timber, Vegetation, Prescribed Fire, and Old Growth

Pagosa

Important Values

- natural fire
- thinning of crowded stands
- commercial firewood gathering
- old growth
- improved harvesting techniques
- timber roads
- public education regarding management-ignited fire and prescribed-natural fire
- cooperation among private and public land owners

Timber, Vegetation, Fire, and Old Growth Concerns and Approa

	Recommendations		
	Planning Goals (research, assessment, monitoring)	Management Ignited, Prescribed Natural Fire	
Ponderosa Pine	<ul style="list-style-type: none"> Emphasize thinning, prescribed fire, and product development in partnership with USFS. Harvest old trees. 	<ul style="list-style-type: none"> Use to restore. It's too costly to suppress when ineffective. Reintroduce a natural-fire regime in pine. Mimic natural-fire frequency in pine, but not in mixed conifer. 	<ul style="list-style-type: none"> Emove Imj Do Pla afte Um We Do cur
Mixed Conifer and Aspen	<ul style="list-style-type: none"> Thin crowded stands. Allow commercial firewood gathering. FS/industry cooperative product development. Reduce prices. 	<ul style="list-style-type: none"> Crown fires are a threat. Allow stand replacement. Let forest start over. 	
Spruce-Fir	<ul style="list-style-type: none"> Study and improve harvesting techniques 	<ul style="list-style-type: none"> Crown fires are a threat. Unroaded: Use PNF in wilderness and unsuitable only. 	
Forestwide [Comments refer to all forest types.]	<ul style="list-style-type: none"> Don't leave all timber roads open to motorized. Sell timber at reasonable prices. Use best genetic research to increase productivity. Don't restore to pre-1870; adapt to current needs and the future. <p>Unroaded:</p> <ul style="list-style-type: none"> Manage in suitable. Build roads. 	<ul style="list-style-type: none"> Educate public on need and risks of MIF and PNF. Cooperate across boundaries to reduce risks; i.e., landowners, USFS, state, municipal. <p>Unroaded:</p> <ul style="list-style-type: none"> Burn for desired results. 	<ul style="list-style-type: none"> Ma Imj incl
Old Growth/ Late Successional	<p>Pine:</p> <ul style="list-style-type: none"> Increase amount of old growth where concern is greatest; i.e., the pine type. Selectively cut still-untouched stands of old-growth pine in the suitable timber base. <p>Pine Unroaded:</p> <ul style="list-style-type: none"> Remove still-untouched small stands of old growth pine from the suitable timber base. <p>Forestwide:</p> <ul style="list-style-type: none"> Where possible, increase old growth characteristics in suitable timber base with combined management. Guide with scor Define old growth according to where stands are located. Aim for objectives suited to old growth in suitable /unsuitable Allow some old growth in roaded suitable. Plan for appropriate distribution of old growth by recognizing stands change over time as they move into and out of old Everyone defines old growth differently. Focus on which forest characteristics we want in a particular area. Revise description of old growth as needed. 		

Timber, Fire, and Old Growth Building Blocks (Pagosa)

- Emphasize restoration approaches (thinning, fire) in pine ecosystem; consider doing the same in mixed conifer.
- Increase old growth in pine forests, where the greatest need exists.
- Establish old-growth objectives based on each ecosystem's situation— stand changes, composition, age, structure, roaded, unroaded, vegetation type.
- Plan the road system to include multiple uses after harvesting.
- Apply improved harvesting techniques.
- Manage current suitable timber base without expanding into unroaded areas.

Timber, Fire and Old Growth Building Block Summary

Pagosa		Blue	Red
1.	Emphasize restoration approaches (thinning, fire) in pine ecosystem; consider doing the same in mixed conifer.	15	0
2.	Increase old growth in pine-type where greatest need exists. <ul style="list-style-type: none"> • Age is important as a health component. Old growth doesn't necessarily mean a healthy forest. • Presently Turkey Springs is not in its original condition. • Building block #1 says it better than #2. • You can use selective cutting to increase old growth, by giving room to grow or for new ones to sprout. • There is value in harvestable timber. • Can't agree with selective cutting as suggested. If you remove old growth by harvesting you remove its value. If trees die, new trees come in. Harvesting doesn't necessarily create an old-growth forest. It is a manicured forest. Fire makes sense in old growth. Cutting takes the biomass away from the nutrient cycle in old growth forest. • Not favorable, who decides what greatest need is and who defines old growth. • Need to clearly define old growth. 	3	7
3.	Establish old-growth objectives based on each ecosystem's situation— stand changes, composition, age, structure, roaded, unroaded, vegetation type.	10	4
4.	Plan road system to include multiple uses after harvesting.	12	2
5.	Apply improved harvesting techniques.	7	0
6.	Manage current suitable timber base without expanding into unroaded areas. <ul style="list-style-type: none"> • Small companies need roads. Large companies may be able to use helicopter, cable logging, not needing new roads. • Not favorable, because roads may need to be built to protect resource, e.g., fire, bugs. • Not favorable because restricting roads also restricts the forest from many uses and in a sense favors "backcountry users"—there are already enough unroaded areas. • Building roads is acceptable for protecting the resource, but not to encourage harvest production, and not favorable if building roads creates another roaded designation. • Do not let "roaded" or "unroaded" determine the management of the area. 	6	9
<i>Added Building Blocks from one break out group.</i>			
7.	Maintain some forest areas for timber harvesting of wood products and for consistent supply.	7	0
8.	Use timber management for production as well as for restoration.	3	0
9.	Educate the public about holistic and ecological sustainability to show the value of timber harvesting.	2	0

Timber, Vegetation, Prescribed Fire, and Old Growth

Columbine

Important Values

Values which underlie the timber, old growth, and fire issues are the following:

- ecological diversity
- cost-efficient timber management
- restoring ecosystem health
- old growth improvement
- economic benefit to local communities and small producers
- reliable timber supply
- natural role of fire
- low impact roads
- long-term investment in roads

Timber, Fire, and Old Growth Concerns and Approaches Matrix

	Recommendations		
	Management Approaches (restoration, planning goals, research, assessment, monitoring, balanced production)	Management Ignited and Prescribed Natural Fire	Road Management
Ponderosa Pine	<ul style="list-style-type: none"> • Emphasize thinning and prescribed fire. • Develop small-diameter products. • Provide reliable future supply for industry. • Use PFPF as model. • Make restoration cost effective. • Prioritize restoration on existing managed areas. 	<ul style="list-style-type: none"> • Allow natural fire to reintroduce itself. • Use fire for restoration. 	<p>Unroaded:</p> <ul style="list-style-type: none"> • Don't open up new timber lands.
Mixed Conifer and Aspen	<ul style="list-style-type: none"> • Do not log (old-growth) aspen. • No maximum production, nor clear-cutting in aspen. 	<ul style="list-style-type: none"> • Allow cover-type conversion by wildfire as a natural process, rather than relying solely on logging or management paradigm. 	
Spruce-Fir	<ul style="list-style-type: none"> • Mimic insects, disease with prescribed fire. • Restoration not needed. • Don't log. Regeneration is a problem. 	<ul style="list-style-type: none"> • Reduce wildfire risks. • Let natural wildfire create mosaic stand pattern. 	

<p>Forestwide</p> <p>Comments refer to all forest types.</p>	<ul style="list-style-type: none"> • Restore to correct past mistakes. • Don't restore; adapt to current needs. • Prioritize harvesting with a restoration emphasis on existing managed areas. • Use industry to restore. • Establish test areas; use to improve monitoring. • Recommend test areas for monitoring purposes. • Use scientists to clarify management needs. • Apply Ponderosa Pine Forest Partnership model forestwide. • Allow firewood gathering to thin overgrowths. • Emphasize ecosystem diversity. • Emphasize a holistic ecosystem approach in standards and guidelines. • Let nature take its own course to readjust to human interference. Don't try to fix the problems we caused. • Use insects as tools in their natural roles to reduce density. • Assess pre-1870 fire effects on watersheds. • Study steep-slope harvesting effects on watershed. • Use best genetics to enhance production. • Guide plans by current, future human needs. • Carry out the current plan. Harvest 95,000 acres of suitable roadless. <p>Unroaded:</p> <ul style="list-style-type: none"> • Do not log in high elevations. • Give preference to local timber industry. • Practice sustained yield. • Develop products w/industry. • Allow firewood/oak cutting. • Offer reasonable prices. • Allow overstory removal. • Use sound scientific information. • Explore cable logging as alternative to road building. 	<ul style="list-style-type: none"> • Use fire and logging to enhance biodiversity. • Use PNF/MIF. • Use fire where applicable, safe, beneficial. 	<p>Roaded Suitable</p> <ul style="list-style-type: none"> • Use temporary and permanent roads to minimize roads. • Consider taking some roaded area substituting other areas. Possibly, areas for recreation. • Expand roaded suitable to include mapped unsuitable. Do with resto <p>Unroaded (Suitable/Uns)</p> <ul style="list-style-type: none"> • Don't go into roadless if: <ul style="list-style-type: none"> • you build roads; • market doesn't demand it; • terrain or other physical constraints; • it creates unacceptable impacts. • Convert some unroaded suitable into wilderness. • Plan a system in unroaded suitable that is better than timber. Consider increasing roadless areas either seasonally or permanently. • Don't build roads in suitable unroaded areas. • Determine feasibility of skyline areas as unroaded suitable. • Consider permanent roads that you don't obliterate. Possibly pull culverts. • Consider permanent roads over long-term investments. • Do not add new roads if the USFS has current roads. • The cost to do Environmental Impact Statements in roadless areas is too high to warrant. • Build roads for ecological need or recreation. • Look at need for roads site-by-site. • Determine the nature and needs of areas for temporary roads. Incorporate technical information. • Don't build new roads; if so, make them low-impact in carefully analyzed areas. • Base rationale to build roads on recreation. • Address need for recreation roads.
---	--	---	---

<p>Old Growth/ Late Successional</p>	<p>Pine:</p> <ul style="list-style-type: none"> • Maintain OG pine. <p>Mixed Conifer:</p> <ul style="list-style-type: none"> • Consider prescribed-fire use in white fir to allow OG pine and Douglas fir to regenerate. <p>Spruce-Fir:</p> <ul style="list-style-type: none"> • Selectively harvest OG if it preserves late successional conditions. <p>Forestwide:</p> <ul style="list-style-type: none"> • Preserve old growth for aesthetic and spiritual values, research, diversity. • Move OG remnants in suitable timber base to unsuitable. • Don't harvest large blocks of OG. • Balance OG where needed, using mgmt., prescribed fire. • Plan for OG 100-300 years in future. • Consider OG in larger land blocks, rather than five-ten acres. • Emphasize biological, functional value of OG. • Determine how much of forest was OG at any time. 	<ul style="list-style-type: none"> • Don't build roads to harvest old g
--	---	--

Timber, Fire, and Old Growth Building Blocks (Col.)

- Keep the permanent road system in the SJNF at the current level.
- Provide a reliable future supply of timber, practice sustained-yield management, offer low-value sales at reasonable prices.
- Use fire and thinning to restore ecosystem health, biodiversity, old growth.
- Return selected segments of the forest to pre-settlement reference conditions.
- Utilize timber roads for recreation uses, maximizing the initial investment.
- Allow natural processes (fire and insects) to repair past human mistakes and create mosaic stand patterns.
- Emphasize on monitoring to include selected demonstration and research areas.
- Emphasize a holistic ecosystem approach to planning and resource management. Maintain old-growth remnants, either by moving stands to unsuitable base or selectively harvesting to preserve late-successional conditions, assessing large land blocks.
- Emphasize restoration management approach in pine and existing timber management areas. Implement cost-effective treatments.
- Harvest timber from current roaded suitable timber base.
- Utilize restoration regimes that involve industry; e.g., for tree thinning and fuels reduction.
- Explore cable logging as an alternative to road building.
- Controversial question: whether or not to construct roads and harvest timber in unroaded suitable timber base.

Timber, Fire, and Old Growth Building Block Summary

Columbine		Blue	Red
1.	Maintain the permanent road system in the SJNF at the current level. <ul style="list-style-type: none"> • The meaning of this statement is not a clear. What is permanent? • Change “maintain” to “keep”. 	5	0
2.	Provide a reliable future supply of timber, practice sustained-yield management, offer low-value sales at reasonable prices. <ul style="list-style-type: none"> • Compared to #11: Need to restore before achieving reliable supply. How do we interpret statement determines how you think of it. 	9	3
3.	Use fire and thinning to restore ecosystem health, biodiversity, and old growth.	9	0
4.	Return selected segments of the forest to pre-settlement reference condition. <ul style="list-style-type: none"> • What determines pre-settlement condition and who selects which segments? 	2	4
5.	Utilize timber roads for recreation uses, thereby maximizing the initial investment. <ul style="list-style-type: none"> • Causes some mixed feelings because it assumes roads will be built. 	6	4
6.	Allow natural processes (fire & insects) to repair the past human mistakes and create mosaic stand patterns.	8	1
7.	Place an emphasis on monitoring to include selected demonstration and research areas.	3	1
8.	Emphasize a holistic-ecosystem approach to planning and resource management. Maintain old-growth remnants, either by moving stands to unsuitable base or selectively harvesting to preserve late-successional conditions, assessing large land blocks. <ul style="list-style-type: none"> • “Holistic” sounds favorable, but what does “holistic ecosystem” really mean? • Second sentence better explains the intention of the building block. 	9	0
9.	Emphasize restoration management approach in pine and existing timber management areas. Implement cost-effective treatments.	6	0
10.	Harvest timber from current roaded suitable timber base.	8	2
11.	Utilize restoration regimes that involve industry, e.g., for tree thinning and fuels reduction.	3	2
12.	Explore cable logging as an alternative to road building. <ul style="list-style-type: none"> • Favorable because cable logging can be done from existing roads, rather than building new roads, and therefore more environmentally sensitive. • Not favorable, because in order for cable logging to be economically viable a lot of timber must be offered. Also, cable logging might provide access to old growth, which is not favorable. 	2	4
13.	Controversial question: whether or not to construct roads and harvest timber in unroaded suitable timber base.	3	5

Timber, Vegetation, Prescribed Fire, and Old Growth

Dolores

Important Values

- thinning and prescribed fire
- industry viability
- ecological limitations and capacities
- cost effective restoration
- avoiding catastrophic fire
- natural fire
- prescribed natural fire
- management ignited fire
- industry involvement in forest health
- meeting future demand for timber
- inherent value of old growth

Timber, Fire, Old Growth Concerns and Approaches Matr

	Recommendations	
	Management Approaches (restoration, planning goals, research, assessment, monitoring, balanced production)	Management Ignited and Prescribed Natural Fire
Ponderosa Pine	<ul style="list-style-type: none"> • Emphasize thinning and prescribed fire. • Make restoration cost effective. • Use PFP as model if it is profitable. • Maximum production where available. 	<ul style="list-style-type: none"> • Allow natural fire to reintroduce itself. • Find markets for small-diameter pine.
Mixed Conifer and Aspen Forests	<ul style="list-style-type: none"> • Balance logging and fire to limit catastrophic fire. • Restore with logging and fire where structurally poor. • Balance commercial mgmt. w/other multiple uses. • Cut aspen only if economically feasible. • Balance aspen logging with wildlife, recreation, aesthetics, stock, and some natural fire. 	<ul style="list-style-type: none"> • Don't suppress just because it's in harvestable timber. <p>Unroaded:</p> <ul style="list-style-type: none"> • Mixed conifer invasion of pine is unnatural; needs fire.
Spruce-Fir	<ul style="list-style-type: none"> • Don't clear-cut. Selectively cut in carefully chosen areas. • Explore cable logging 	

<p style="text-align: center;">Forestwide</p> <p>These comments refer to all forest types.</p>	<ul style="list-style-type: none"> • Guide harvest by ecological limitations, but keep industry viable. • Harvest for sustained yield only if it aids forest health . • Increase no. of dead timber salvage sales into large-volume sales. Provide for viable local industry, local economy. • Harvest within ecological limitations, capacities. <p>Unroaded:</p> <ul style="list-style-type: none"> • Consider winter logging as way of reducing roads. • Allow harvesting where access exists, despite RARE II designations. • Reach current Allowable Sale Quantity by accessing unroaded suitable roadless timber base. • Implement the current Plan, including the 95,000 acres in current unroaded suitable base. 	<ul style="list-style-type: none"> • Use PNF/MIF. • Build long-term cross-boundary training and practice of MIF. • Combine harvests and prescribed fire to resolve urban interface problems. • Educate the public. • Don't allow large burns within site of homes. • Analyze large-fire effects on watersheds before burning. • Double or triple smoke some years, not all. • In interest of economic values, salvage logs after fire. <p>Unroaded:</p> <ul style="list-style-type: none"> • Increase prescribed fire with thinning, despite smoke and liability. • Avoid prescribed fire where the forest may take centuries to return. • Continue to build long-term cross-boundary agency partnerships. • The interface is where prescribed fire is most needed, even though it is riskier. Combine harvests with fire to resolve urban interface problems. • Educate the public. • Smoke is undesirable and I wouldn't want to see burnt stands from my home. • Possible negative effects of large-scale prescribed natural fire events on watersheds should be analyzed and used to determine whether we reintroduce such a regime or not. • Double or triple smoke some years when conditions are right, but not every year. 	<ul style="list-style-type: none"> • E • a • C • h • r • F • h • r • F • r • U • U • t • g • T • r • s • c • r • T • F • t • t • c • l
<p style="text-align: center;">Old Growth / Late Successional</p>	<p>Forestwide:</p> <ul style="list-style-type: none"> • Don't consider old growth as timber, but as having an inherent value of its own and that it provides biological equilibrium. • Hands off old growth. • Enhance old growth using harvesting as tool. • Emphasize old growth in non-suitable if going to manage for it. • Harvest old growth for economic benefits, recognizing need to maintain. 		

Timber, Fire, and Old Growth Building Blocks (Dolores)

- Harvest timber within ecological limitations and capacities.
- Use logging and management-ignited fire as management tools to avoid catastrophic fire.
- Provide for a viable, local industry, and economy.
- Balance aspen logging with other multiple uses, aesthetics, and fire.
- Harvest for sustainable yield only if it assists forest health.
- Implement the current Plan's Allowable Sale Quantity by utilizing the current unroaded timber base.
- Allow natural fire to reintroduce itself.
- Educate the public about management-ignited fire.
- Build roads in carefully analyzed areas.
- Use industry to achieve forest-health goals, building roads as necessary.
- Avoid fires in areas that do not have capacity for natural recovery.
- Build roads into unroaded suitable base to meet future timber demands and forest health needs. *(Differences of opinion exists on building roads. This statement doesn't reflect study group consensus.)*
- Allow harvesting where access currently exists.
- Develop appropriate harvesting prescriptions to enhance old growth, emphasizing old growth in non-suitable base and recognizing its inherent value.
- Combine harvesting with fire to resolve urban-interface fire risks.

Timber, Fire, and Old Growth Building Block Summary

	Dolores	Blue	Red
1.	Harvest timber within ecological limitations and capacities.	4	2
2.	Use logging and management-ignited fire as management tools to avoid catastrophic fire.	3	3
3.	Provide for a viable, local industry and economy. <ul style="list-style-type: none"> • Not favorable, because providing for “local industry and economy” is bias and limiting. <i>Note the relationship between building blocks #3 and #10.</i> <ul style="list-style-type: none"> • It’s favorable to help the timber industry to survive. • Logging can be a tool. It is inter-related with forest health. • We may need to change parameters to make the two work together. • Loss of industry will lead to bug infestation, which may lead to losing the whole forest. 	5	5
4.	Balance aspen logging with other multiple uses, aesthetics and fire.	1	1
5.	Harvest for sustainable yield only if it assists forest health. <ul style="list-style-type: none"> • Dislike the word “only” because it is too narrow. There may be other reasons to harvest besides “restoration” or forest health. • Favorable because sustainable yield harvesting will result in ecosystem health. 	4	5
6.	Implement the current plan ASQ by utilizing current unroaded timber base.	2	2
7.	Allow natural fire to reintroduce itself. <ul style="list-style-type: none"> • Favorable to let lightning-ignited fire burn if it does not threaten property or human life. Is this also the FS direction? • It is not acceptable to allow natural fire to reintroduce itself. • Do not allow natural fire to reintroduce itself without monitoring. 	4	1
8.	Educate the public about management-ignited fire.	2	0
9.	Build roads in carefully analyzed areas.	0	1
10.	Use industry to achieve forest health goals, building roads as necessary.	6	0
11.	Avoid fires in areas that do not have capacity for natural recovery.	0	1
12.	Build roads into unroaded suitable base to meet future timber demands and forest health needs. <ul style="list-style-type: none"> • Log in unroaded suitable base and build roads as needed (temporary, close after harvest). • Politically untenable now. Should do adaptive management in unroaded areas now, then consider logging in future. • Do not harvest in unroaded areas until it is really needed. • Not favorable, because we need to “bottom line” somewhere and not keep harvesting and building roads deeper and deeper into the forest—to limit the human use priority attitude. 	1	7
13.	Allow harvesting where access currently exists.	4	1
14.	Develop appropriate harvesting prescriptions to enhance old growth, emphasizing old growth in non-suitable base, and recognizing its inherent value. <i>Two interpretations of this building block are possible.</i> <ul style="list-style-type: none"> • Remove some old growth for a healthier forest. Leave some for wildlife. • Harvesting to enhance is not opposed to previous statement. It is not politically feasible to take all the old growth for timber. 	5	2
15.	Combine harvesting with fire to resolve urban-interface fire risks.	3	0

Recreation

Issue Description

The land areas and travel systems of the San Juan National Forest are utilized by a broad range of uses. Although uses of the San Juan National Forest have historically emphasized commodity activities, social, economic, and demographic transformations have significantly increased recreation. This issue addresses what the sustainable levels of various types of recreation are while sustaining a healthy and diverse ecosystem. Recreation also addresses the importance of wilderness to sustain human need for solitude, retreat, and renewal.

Presentation summary

Recreation Opportunity Spectrum classes used to manage recreation by settings and activities in the San Juan National Forest are:

- Primitive(P): solitude, unaltered, natural, few users. High need for outdoor skills.
- Semi-primitive non-motorized (SPNM): solitude is probable and natural, with no motorized vehicles on trails.
- Semi-primitive motorized (SPM): moderate solitude, mostly natural, low user concentration. High degree of skill and risk for motorized user.
- Roaded natural (RN): developed sites, mixture of users, natural views from roads.
- Roaded natural-closed (RN-C): same as RN, but closed to some activities.
- Roaded natural-modified (RN-M): chance to get away from others with easy access, altered by timber harvests, etc.
- Rural (R): chance to interact with other users and accessibility are important.
- Urban (U): chance to interact with others and accessibility are more important than outdoor skills.

Trends

Distribution of gross national product figures show that 75 percent of expenditures associated with national forests is recreation related. Timber - 2.7%; mining - 7.8%; range - .7%; and fish and wildlife - 9.9%.

The US population is growing older and more slowly than in the past at a rate of .5% a year. Median age in 1900 was 23. It will be 36 in 2000 and 41 in 2025. In 2020, 20 percent of Americans will be 60 years or older.

Possible affects on national forest management

Older people tend towards fewer physical activities (bird watching, nature studies, and environmental education). They seem to prefer motorized recreational travel and facilities with more modern amenities.

One survey shows that a level campsite is the most-preferred developed campground improvement. Rustic hand pumps are second, and flush toilets are the third.

It is still to be proved whether baby boomers, the bulk of the aging population, will have different preferences. Wilderness use has increased (90%). Conversely, driving for pleasure also has increased.

Of the total United States population increase, 81 percent will occur among racial and ethnic groups. Historically, those groups partake less of outdoor camping and backpacking types of recreation than whites. People will continue to move from rural to urban areas.

Current developed campgrounds forestwide have not reached capacity. Most people, whether locals or visitors, say they like the campgrounds the way they are.

Recreation capacity analysis

A recreation carrying capacity analysis is addressing current recreation problems in SJNF wildernesses. The analysis (a management issue) is not part of the Forest Plan revision (planning issues). It will be completed before the revision. It has a separate public involvement process, but various data from it will be incorporated into the revision research.

The analysis divides the forest into compartments, each of which are assigned a maximum number of people an area can hold before degradation occurs.

If and when current ROS classes (set by the Forest Plan) are modified in the revision, the recreation capacity levels for each compartment can change.

Recreation

Pagosa

Trends observed by study group members

- An increase of people moving here for outdoor opportunities.
- An increase in all uses. Individual uses are more harmful because of modernized technology.
- More horses has led to more impact on trails.
- More ATV use, especially during hunting season (Sept. – mid-Nov.) and in the noise they make.
- More ATV use originating from near forest boundaries where residential growth is increasing.
- ATVs displacing other uses by making their own trails.
- The Forest Service managing less for uses that are on the increase (RVs, driving for pleasure, hiking on Continental Divide).
- Deteriorating sanitary conditions from increased use, notably during hunting season. There is no place for them to put their trash, which is increasing in volume, as well.
- Fewer educated hunters.
- Car campers passing up developed campsites in order to disperse camp along waterside, especially after developed waterside sites are occupied.
- Some increase in snowmobile usage.
- More group users – hiking, camping, skiing – possibly due to growing adventurous spirit, combined with increased experience and familiarity with the area.
- An increase in retired folks using forest. *Note: The average age in the Pagosa Springs area is increasing.*
- More horse trailers and more people using horses for their summer outdoor experience.
- Noticeable increase of fifth-wheels and motor homes.

Discussion Questions

- What recreation values do you want to preserve?
- What trends do you see occurring in forest recreational use?
- How should the USFS management adapt to the trends?
- What recreation opportunities should your district emphasize?
- What is the appropriate level of campground development?
- Are there facilities not provided that you would like to see?

Important Values

- a forest in its most natural state that offers: solitude and quietude, scenic views, a remote experience free of injury to the environment, an alternative to the developed environments where most people live, a low-density of people and activity, diverse wildlife habitat for diverse experiences and safe for threatened and endangered species, amenities that meet the needs of people, balanced and diverse recreation opportunities for all, where one does not adversely affect the other and where recreation and non-recreation use of the forest do not adversely affect each other.
- backcountry opportunities
- wildlife habitat
- primitive recreation
- loop roads
- emergency facilities
- better toilets
- improved signage
- appropriate motorized uses
- scenic vistas
- endangered species
- current level of accessibility
- current level of development
- public education
- non-urban amenities
- specific sites of value: Four Mile Falls; Piedra Box Canyon, Windy Pass, Piedra River, and the roadless backcountries of the Weminuche and South San Juan Wildernesses.

Recreation Concerns and Approaches (Pagosa)

	Recommendations		
	Resource Allocation and Reallocation (ROS classifications and opportunities)	Recreation Development, Quality and Direction	Cooperat
<p>Increased Recreation Use Impacts</p> <p>Technology versus traditional modes of travel and recreation; ability of FS to manage; impact on water quality and riparian conditions.</p>	<ul style="list-style-type: none"> • Continue current ROS mix • Provide more short loops for the aging population. • Strictly maintain current level of accessibility and development. • Preserve accessible natural state, vistas (Windy Pass, W. Fork San Juan). • Preserve areas in their most natural state with few people. • Sustain areas of low daily use. • Preserve scenic vistas. • Provide diverse vegetation for diverse wildlife habitats and experiences. • Protect endangered species. • Emphasize non-urban. • Expand existing sites. 	<ul style="list-style-type: none"> • Keep rural and urban ROS classifications near towns, not in national forest. • Preserve quality of experience. • Limit users. • Charge higher fees. 	<ul style="list-style-type: none"> • Assess cur • Settings to • Implement to reduce r • Control lar garbage m • Encourage USFS with
<p>Trail Use and Conflicts</p> <ul style="list-style-type: none"> • Access (travel mgmt.) to/for: aging and challenged population; difficult to reach places; retrieve game. • Impacts on: ecological values and conditions; appropriate mix of opportunities. 	<ul style="list-style-type: none"> • Separate incompatible uses. • Classify trails to disperse users. • Provide short loops off existing trails to disperse users. 	<ul style="list-style-type: none"> • Clear trails, using chainsaws, earlier in spring. • Balance when to clear trail for user convenience and when not to for resource protection. 	<ul style="list-style-type: none"> • Classify tra difficulty. • Educate pu
<p>Motorized Uses</p> <p>Noise, off-trail rutting, violations, displacing other users and wildlife.</p>	<ul style="list-style-type: none"> • Do not reduce current level of motorized opportunities. • Prohibit in areas that are physically, aesthetically, and socially limited in capacity to accommodate motorized use. 	<ul style="list-style-type: none"> • Don't use government land to provide for human toys. 	<ul style="list-style-type: none"> • Assess whe appropriate

<p>Sensitive Areas</p> <p>Riparian, wildlife, high use, skiing.</p>	<ul style="list-style-type: none"> • Limit road use when wildlife needs dictate it. • Remove from East Fork from ski area prescription (several environmental barriers; financially improbable). • Preserve backcountry opportunities in the Weminuche and South San Juan Wildernesses. • Rehabilitate East Fork riparian areas, mitigating previous camping impacts. • Preserve East Fork for wildlife and habitat. • Reduce ATV use in Devil and Chris Mt. areas. 	<ul style="list-style-type: none"> • Provide better toilets in higher-use areas and require concessionaires to upgrade their sites. 	<ul style="list-style-type: none"> • Study rafting • Develop a r current uses
<p>Facilities— Campgrounds:</p> <p>Overuse, location, quantity and quality of campgrounds and amenities, sanitation.</p>	<ul style="list-style-type: none"> • Provide an appropriate level of facilities (especially sanitation) when overuse threatens public health. • Don't attract more use by improving facilities. • Develop to a certain level and let private enterprise provide more "developed" facilities. • Do not increase developed sites if they require more maintenance for which there is no budget. • Locate future campsites away from water. 	<ul style="list-style-type: none"> • Stop overuse at East Fork and Williams Cr. campgrounds. • Have emergency facilities in forest for elderly. • Rotate use of dispersed recreation areas to rest them periodically. • Improve toilets in heavy-use areas. Require of concessionaires. • Let private business provide high amenities. • Need more "loops" off of existing roads. 	<ul style="list-style-type: none"> • Educate pul and waste d • Sanitation at influx. Prov • Trash is a p
<p>Primitive Dispersed Areas</p>	<ul style="list-style-type: none"> • Provide more primitive rec. for those who are prepared. • Create "sacrifice areas" for overflow dispersed camping. 		
<p>General</p>	<ul style="list-style-type: none"> • Expand Wolf Creek Ski area when capacity is reached. • Continue current management, while continuing public input. • ROS must be enforceable. • ROS classes need to fit the actual terrain. 	<ul style="list-style-type: none"> • Impose hunting license surcharge for cleanup. • Involve state and local government in addressing trash problems. • Stay flexible to adjust to future needs/trends. 	<ul style="list-style-type: none"> • Improve sig • Provide edu

Recreation Building Blocks (Pagosa)

- Educate the public on uses and misuses of resources.
- Establish a Plan that is flexible to changing needs and trends and is responsible.
- Provide more short-trail loops for the aging population.
- Classify trails to educate the public about the degree of difficulty.
- Preserve accessible natural vistas.
- Expand existing campground campsites, maintaining current levels of accessibility and development.
- Separate incompatible uses.
- Maintain current levels of motorized use, except in areas that do not have the capacity to physically, aesthetically, or socially accommodate.
- Preserve the quality of the recreation experience, controlling overuse and harmful resource impacts.
- Control large influx of users to manage impacts.
- Remove East Fork from ski area designation, preserving it for wildlife.
- Rotate use of dispersed recreation areas to rest them.
- Let private business provide higher-amenity recreation facility developments.
- Develop interagency cooperation on hunter impacts.

Recreation Building Block Summary

		Pagosa	Blue	Red
1.	Educate the public on uses and misuses of resources.		9	0
	<ul style="list-style-type: none"> • Important to not only educate the public about closures and resource management, but also to emphasize the rules and regulations that permittees and timber operators, etc. have to follow. 			
2.	Establish a plan that is flexible to changing needs and trends.		9	0
	<ul style="list-style-type: none"> • Note add words, “and responsible”. 			
3.	Provide more short trail loops for the aging population.		4	1
	<ul style="list-style-type: none"> • Elderly have experienced enough in their lifetime. They can use what’s already accessible. • It’s a question of what’s realistic. Over-development versus a reasonable range of accessibility. • Elderly and disabled don’t have to go everywhere. 			
4.	Classify trails to educate the public about the degree of difficulty.		1	0
5.	Preserve accessible natural vistas.		1	1
6.	Expand existing sites, maintaining current levels of accessibility and development.		7	1
7.	Separate incompatible uses.		2	5
	<ul style="list-style-type: none"> • Is separating the “users” the best way to solve problems of incompatible “uses” ? • Check your guns at the gate. • Separating would be extremely difficult to do. • It keeps you out from where you want to go. • Using signage or other means to make people aware of dominant uses of an area is more acceptable than prohibiting access. • Favorable, because hikers and ATV users need to be separated. • Not favorable, because the terrain will sort out the possible uses. Otherwise, it is only fair to allow all uses. • Not favorable, because catering to one group, restricts other group. • Not favorable, because uses are already segregated by restrictions imposed by wilderness. Furthermore, when considering multiple uses on the whole forest, restrictions posed by wilderness areas needs to be considered as part of the whole picture. 			
8.	Maintain current levels of motorized use, except in areas that do not have the capacity to physically, aesthetically, or socially accommodate.		4	0
9.	Preserve the quality of the recreation experience, controlling overuse and harmful resource impacts.		4	1
10.	Control large influx of users to manage impacts.		3	3
11.	Remove East Fork from ski area designation, preserving it for wildlife.		3	8
	<ul style="list-style-type: none"> • Not favorable, because wildlife can still use ski area, plus, big game leave the area in the winter. • Not favorable, because it has already been designated, the number of skiers is increasing, and they contribute to the local economy. • Whether or not to remove the “designation” should not be a forest plan issue. Rather, keep the option since it is already designated and wait until there is a proposal, which will have to go through NEPA, thereby analyzing all the impacts. • Favorable to remove designation, because there would be a lot of commercial development in the valley that would impact the wildlife. • Favorable to remove designation, because although skiers may contribute to the economy, it is the locals who will pay and be impacted by the infrastructure needs. 			
12.	Rotate use of dispersed recreation areas to rest them.		1	1
13.	Let private business provide higher-amenity recreation facility developments.		4	2
	<ul style="list-style-type: none"> • Forest Service shouldn’t compete. • It is a question of whether the development is on or off the forest. Giving private business the run of development on the forest is highly questionable and not acceptable. 			
14.	Develop interagency cooperation on hunter impacts.		4	0

Recreation

Columbine

Trends observed by Columbine study group members

Increases in:

- commercialization: skiing, mountain biking;
- all motorized travel on improved roads, including summer RV campers in Hermosa area: developed and dispersed;
- mountain biking;
- 4x4s not staying on roads;
- off-road ATV hunters (fewer go into backcountry, staying closer to main roads);
- crowds after Fourth of July instead of the actual weekend, which has slowed down;
- archery and muzzleloader hunting;
- snowboarders;
- people with less recreation time, signs of which include camping closer to roads when hunting; Related: increase in out-of-shape OG clients;
- wilderness use;
- active-retired population settling near forest boundaries and corridors;
- poor urban dwellers/squatters;
- desire for more amenities, such as campgrounds and associated services; at the same time, mountain bikers and motorized users stick to improved trails;
- parking at trailheads near town (reflection of lifestyles with less time for recreation, so they recreate closer to town, more frequently);
- less-skilled, less wilderness-wise wilderness and backcountry users: i. e., snowboarders and mountain climbers;
- kids on ATVs recklessly racing down roads;
- four-legged animals on trails (llamas, goats, mules, and dogs);
- technology used in forest recreation, i. e., cellular phones, GPS (allows easier access for more people, who sometimes lack outdoor skills), group travel.

Important Values

- *Maintain or enhance settings that have the following characteristics:*
 - enjoyment of the outdoors in ways that do not impose or emphasize recreation as more important than other forest needs
 - naturally clean, with no trash
 - quiet
 - solitude
 - quality water
 - wilderness
 - public education
 - group campgrounds
 - minimally developed campgrounds
 - loop trails
 - trail etiquette
 - high-mountain, pristine lakes (Columbine Lake)
 - “accessible” riparian areas
 - non-overgrazed
 - large areas designated for non-motorized use (they relieve wilderness use): ROS classifications, Primitive and Semi-Primitive Non-Motorized.
 - privacy of Semi-Primitive Non-Motorized (SPNM) areas
 - natural, unaltered, backcountry, managed areas
 - solitary experiences
- Activities:**
- non-conflicting uses
 - ability to ride a horse wherever you want

Recreation Concerns and Approaches Matrix (Columb

	Recommendations		
	Resource Allocation and Reallocation (ROS Classification and Opportunities)	Recreation Development, Quality and Direction	
Increased Recreation	<ul style="list-style-type: none"> • Continue current ROS mix to guide development. • Arrange ROS to concentrate compatible uses. 		<ul style="list-style-type: none"> • Evaluate we know
Trail Use and Conflicts	<ul style="list-style-type: none"> • Create short, day-use trail loops close to urban areas. • Get motorized vehicles off single tracks by opening timber roads in roaded natural-closed (RN-C). 	<ul style="list-style-type: none"> • Provide trailhead signs designating prescribed use on that trail. • Don't improve trails or upgrade roads that will cause more use. • Provide more trails, facilities for mentally/physically challenged. 	<ul style="list-style-type: none"> • Teach t • Provide interpre
Motorized Uses	<ul style="list-style-type: none"> • Close motorized trails that lead into wilderness. Make semi-primitive, non-motorized (SPNM). 	<ul style="list-style-type: none"> • Add "hardened" ATV loops. 	
Backcountry Areas to Preserve and Protect	<ul style="list-style-type: none"> • First Fork of the Piedra River. • Hermosa Park backcountry and Hermosa Creek drainage. • Big Lick Trail. • Molas, Sultan Peak Colorado Trail area. • Baldy Mountain/Sheep Mountain in the Piedra Area. • Upper Lime Creek area. • Bear Creek watershed. • Ice Lake Basin. • San Miguel/Upper Cascade. • Saddle Mountain in the Pagosa Ranger District. 	<ul style="list-style-type: none"> • Establish and locate hardened, sacrifice areas of high-density use close to population centers; this addresses management conflicts, overuse, enforcement of regulations, trash control, etc. 	

<p>Facilities– Campgrounds</p>	<ul style="list-style-type: none"> • Promote natural settings, destroy roads, maintain low level of developed campgrounds. • Concentrate improved development along transportation corridor. • Don't invest in highway recreation experiences, e.g., the San Juan Skyway. It brings more visitors, causes congestion, and hinders commercial use. • Keep the level of currently provided campground services and facilities, especially since surveys show respondents are not asking for more amenities. • Provide a spectrum of development levels. • Don't improve campgrounds that are close to wilderness; they are overused (Pine River Campground). 	<ul style="list-style-type: none"> • Don't improve facilities or access; rather increase personnel. • Expand current developed areas. • Manage minimally developed campgrounds and let the private sector provide highly developed campgrounds. • Keep RVs at forest outskirts, along roads to contain noise and congestion. • Increase amenities in high-density areas to help reduce backcountry use (for example, Haviland Lake and Junction Creek). • Manage campgrounds and facilities where managers have less distance to travel. Do so to pull users, such as RVers, away from natural, sensitive areas. • Don't improve facilities or access. • Do not use national forest budget for highway recreation developments; let Colo. Dept. of Transportation and towns pay. • Do not provide hot showers on national forests. • Avoid crowding. Provide facilities to meet different needs (urban, less-urban, semi-primitive) by dispersing campgrounds. • Expand some currently existing campgrounds to attract users away from more primitive areas. • Provide some degree of developed facilities, but not excessive. • Provide more group campgrounds. • If USFS lagged to meet demand, maybe the private sector would pick up the slack on the outskirts of the forest. • Do not provide more RV campsites; too noisy <p>User fees</p> <ul style="list-style-type: none"> • Keep fee income in local economy. • Strongly opposed. We already pay through taxation. • Use to control overuse. • Strongly in favor. • If there are fees, gradate them so that the fee correlates with the experience. Backcountry should cost less than developed. • Charge more for developed facilities. • Don't compete with private business, especially if it raises prices. • Make paying fees convenient. • Explain where and how fees are being used. • Use fees for local improvement. • Consider selling permits where other outdoor permits are sold. • Only use permits in problem areas to help pay for maintenance. <p>Haviland Lake</p> <ul style="list-style-type: none"> • Do not put in electricity. • Increase number of campsites, not more and better amenities. Raise fees for more amenities.
------------------------------------	--	--

Primitive Dispersed Areas	<ul style="list-style-type: none"> • Don't designate wilderness areas, if it brings more users. • Emphasize primitive, backcountry experience. • Don't fix or maintain roads that access primitive experiences. 	<ul style="list-style-type: none"> • Keep primitive campgrounds. 	
General	<ul style="list-style-type: none"> • Prohibit hunting in some areas (Falls Creek). 	<ul style="list-style-type: none"> • Don't market or promote area. • Don't count cars (San Juan Skyway) to leverage more funds. • Signage for rural roads, too. More signs equal a higher comfort level and directs use towards positive outcomes. 	<ul style="list-style-type: none"> • Owner: • Use no: • Teach t • Provide groups experie • Enlist t • Require etiquett • Create promot

Recreation Building Blocks (Columbine)

- Protect sensitive areas such as backcountry areas and trails, and high mountain lakes.
- Make semi-primitive areas non-motorized.
- Restrict motorized access in areas adjacent to wilderness.
- Provide more trails and facilities for mentally and physically challenged, elderly, and families with small infants and children.
- Focus on minimally developed campground facilities; let the private sector provide for the more highly developed campgrounds.
- Create resource allocation designations which fit the capabilities of the landscape (terrain, resource sensitivity, etc.).
- Concentrate improved development and facilities along existing transportation corridors.
- Emphasize voluntary, educational solutions to user conflicts and resource degradation.
- Concentrate high-impact uses in developed sites, decreasing resource damage in dispersed areas.
- Provide a spectrum of campground development facilities.
- Do not develop highly urbanized facilities near wilderness.

Recreation Building Block Summary

	Columbine	Blue	Red
1.	Protect sensitive areas such as backcountry areas and trails, and high mountain lakes.	10	0
2.	Make semi-primitive areas non-motorized.	7	3
3.	Restrict motorized access in areas adjacent to wilderness.	10	1
4.	Provide more trails and facilities for mentally and physically challenged users. <ul style="list-style-type: none"> • Add “elderly and families with small children”. 	1	2
5.	Focus on minimally developed campground facilities; let the private sector provide for the more highly developed campgrounds.	9	1
6.	Create resource allocation designations which fit the capabilities of the landscape (terrain, resource sensitivity, etc.).	4	2
7.	Concentrate improved development and facilities along existing transportation corridors. <ul style="list-style-type: none"> • Not a favorable building block because big, developed campgrounds in the forest service are not desirable, e.g., KOA style. 	8	3
8.	Emphasize voluntary, educational solutions to user conflicts and resource degradation.	8	0
9.	Concentrate high impact uses in developed sites, decreasing resource damage in dispersed areas.	6	1
10.	Provide a spectrum of campground development facilities. <ul style="list-style-type: none"> • The notion of facilities in general is not acceptable, as well as the word “develop.” 	0	7
11.	Do not develop highly urbanized facilities near wilderness.	7	1

Recreation

Dolores

Trends observed by study group members

Increases in:

- all uses, in general
- motorized use
- dogs in forest
- hikers above timberline
- camping at Groundhog and West Dolores
- “non-consumptive use”: day-hiking, ATVs, mountain biking, snowmobiling
- mountain bikers on jeep roads, as well as trails
- horse traffic
- cross-country skiing
- urban residences near national forest boundary
- hunting and fishing (locals and out-of-towners; hunting may still be alive in Colorado because there is no limit on out-of-state-permits)
- visitation of people escaping summer heat in Texas and hot zones
- RV camping
- use of river corridors by RVs
- visits to Mesa Verde
- weekend drivers (locals)
- wildlife watching
- dispersed camping (it’s harder to find quiet spots)
- boating and camping at McPhee Reservoir
- Regulations are not keeping up with increased use of certain activities; e.g., hunting season and ATVs.
- Locals go to dispersed camping sites to escape developed campgrounds.
- Elk are wintering higher.
- Wintering elk are forced more onto private property (reason not given).
- Deterioration in some dispersed campsites, such as overcutting of trees for firewood and trash dumped in forest.
- Deer hunting has leveled off.
- Hunting will not increase, and may decrease, within 25 years.

Important Values

- quiet places.
- easily accessible, flat backcountry areas where few people go.
- calving and other sensitive wildlife areas.
- what the resource needs, rather than what people want.
- solitude.
- primitive ROS designations for wildlife.
- accessible places and the “facilities” to reach them.
- the opportunity for everyone to experience diverse ROS areas.
- available non-segregated or user-limited ROS classified areas.
- non-urban ROS free of imposition and domination of urban users.
- the experience of trees, wildlife, water, and solitude in a natural, clean setting.
- freedom from capacity regulations or being told what to do or not do.

Recreation Concerns and Approaches Matrix (Dolore

	Recommendations		
	Resource Allocation and Reallocation (ROS classification and opportunities)	Recreation Development, Quality and Direction	Cooper
Increased Recreation Use Impacts	<ul style="list-style-type: none"> • Continue with current ROS designations, in spite of trend projections. • Identify and sort areas by predominant uses, without prohibiting others, to show the public where dominant uses occur. • Designate areas for a mix of compatible uses. • Base ROS designations on topography. • Make as many types of uses available on the forest as possible. • Preserve multiple use— do not segregate use more than necessary. • Consider resource impacts before making allocation decisions. • Provide ROS opportunities for quality experiences. • Exclude urban ROS from Plan, because those people encroach upon others. • Provide a mix so that no single user group has a larger ROS designation. 	<ul style="list-style-type: none"> • Provide regulations that protect resources against user increases. • If shown to produce positive results, disperse users to reduce resource impacts. • Develop a Plan of appropriate trails and roads for public use and the best times for use. Be seasonally flexible. • Rotate area closures and ROS designations to protect resources. • Don't allow recreation during calving times in the Nipple Mountain country. • Adapt use patterns during hunting season. • Close roads during bad weather; changing between Motorized to Non-Motorized. 	<ul style="list-style-type: none"> • Determine c on human d • Do not crea because the and they de • Provide pan substitute fc interpretive. • Make small
Trail Use/Conflicts		<ul style="list-style-type: none"> • Develop trailheads at current popular areas. 	
Motorized Uses	<ul style="list-style-type: none"> • Include places to escape motorized uses. • Increase opportunities for motorized use, based on current population trends. 	<ul style="list-style-type: none"> • Install seasonal restrictions with signage to aid enforcement. • Provide snowmobile parking at Barlow Creek. 	
Sensitive Areas	<ul style="list-style-type: none"> • Mitigate winter recreation impacts on wildlife by designating areas for certain activities; in particular, for motorized use. • Leave Bear Creek roadless. • Leave top of Stoner Mesa roadless. • Leave Hermosa Creek roadless. 		

<p>Facilities– Campgrounds</p>		<ul style="list-style-type: none"> • Don't improve facilities/access in anticipation of more users. • Improve under-used campgrounds. • Base development on the use and the area. • Place campgrounds at heavily used dispersed camp areas. • Increase campgrounds in sacrifice areas to protect others. • Provide accessible and more spacious sites. • Place campgrounds to have the lowest impact, such as rocky, more durable ground. Build such sites, if necessary. • Don't provide amenities for RVs that private industry can. • Do not accommodate RVs. • Limit future campground development to existing roads; do not improve roads for expanded development. • Keep campgrounds open in winter. Closing them displaces users, forcing them to sensitive areas. • Provide sites that are large enough. • Keep campgrounds currently on rivers, but do not develop more on water. • Additional spaces at certain current campgrounds are acceptable. • If the money stays local and you do not compete with private campgrounds, consider creating a special use campground area similar to a ski area special use permit. • Since Congress isn't going to appropriate money for improvements, and campgrounds are not at capacity, leave them as they are. • Provide more level campsites. • Build developed campgrounds near forest boundaries. • Encourage more privately developed campgrounds. • Do not try to accommodate out-of-state or national desires. • Provide corrals for horse packers. • Provide gates through range allotment fences to enhance mobility for recreationists. • Provide more group picnic areas adjacent to water, with space for recreation. <p><i>McPhee Reservoir</i></p> <ul style="list-style-type: none"> • Allow improvements if the developer pays. • The area is already urban— allow development. • Expansion is not acceptable, since improvements will increase traffic. • Expand existing slips at marina, but do not expand to House Creek. • Build an overnight dock at House Creek for camper-boaters. • Provide an outdoor education facility in a most beneficial site for such a facility (CDOW's old fish hatchery, Jersey Jim Lookout Tower, a hut system). • Provide seminars in a natural setting, maybe a "rendezvous" if affordable. 	<ul style="list-style-type: none"> • Assess getti sales tax on • Examine hc before jump •
------------------------------------	--	--	--

Primitive Dispersed Areas	<ul style="list-style-type: none"> • Nipple Mountain lends itself to non-motorized use, due to few access points. • Don't advocate more wilderness. Disperse non-wilderness activities to reduce overuse. 		
General	<ul style="list-style-type: none"> • Guide decisions on ROS settings and activities by resource impacts. • Figure how to enforce designations. 	<ul style="list-style-type: none"> • Limit out-of-state hunters. • Control increasing hunting season problems, such as motorized vehicle-damage to muddy ground. • Increase Forest Service personnel presence. 	<ul style="list-style-type: none"> • Involve pub • Educate the regulations. • Brochures. • Require an card. • Provide inc of punishm • Establish an • Provide sen Juan Mts. A • Establish an users pay sn • Teach low-i trash).

Recreation Building Blocks (Dolores)

- Continue current ROS designations.
- Designate areas for a mix of non-conflicting uses.
- Preserve multiple use; avoid segregating uses.
- Exclude urban ROS designations.
- Maintain an equitable distribution of ROS classes to accommodate all users.
- Mitigate winter recreation impacts on wildlife.
- Leave sensitive areas unroaded.
- Develop a seasonally flexible, comprehensive trail and road plan.
- Rotate closures and ROS designations to protect resources.
- Develop trailheads at popular sites.
- Place campgrounds at heavily used dispersed recreation sites, at sacrifice areas, in areas where they will have least impact, on current road system away from natural water bodies.
- Build developed campgrounds near forest boundaries.
- Provide horse corrals and access gates through allotments to enhance recreational mobility.
- Provide more group picnic areas near water.
- Provide an outdoor educational facility in a beneficial location.
- Do not pursue additional recreation-fee collection.
- Increase management of hunting.
- Provide education and incentives to involve the public in reducing conflict and protecting resources.

Recreation Building Block Summary

Dolores		Blue	Red
1.	Continue current ROS designations.	2	1
2.	Designate areas for a mix of non-conflicting uses. <ul style="list-style-type: none"> • Building blocks # 2, 3, 5, & 18 are all related. Strong value toward multiple use. • Multiple use seems to equate with dominant use, though. • Not every part of the forest is good for every use; avoiding segregation may not take that into consideration. 	6	0
3.	Preserve multiple use, avoiding segregating uses. <ul style="list-style-type: none"> • Favorable, because there is not enough forest or public land to segregate uses. 	8	1
4.	Exclude urban ROS designations.	0	0
5.	Maintain an equitable distribution of ROS classes to accommodate all users.	3	0
6.	Mitigate winter recreation impacts on wildlife.	1	0
7.	Leave sensitive areas roadless.	2	1
8.	Develop a seasonally flexible, comprehensive trail and road plan.	5	0
9.	Rotate closures and ROS designations to protect resources. <ul style="list-style-type: none"> • Not favorable, because temporary closures do not seem to allow enough time to effectively restore the resource. Also, this is probably not practical because it is already too difficult to keep track of the permanent closures. • Micro-management: too many rules and too big of an enforcement problem. Building block #18 is an effective alternative to #9. 	0	4
10.	Develop trailheads at popular sites.	4	0
11.	Place campgrounds at heavily used dispersed recreation sites, at sacrifice areas, in areas where they will have least impact, on current road system away from natural water bodies. <ul style="list-style-type: none"> • Dislike, "away from natural water bodies," otherwise this is an acceptable building block. 	2	1
12.	Build developed campgrounds near forest boundaries.	2	1
13.	Provide horse corrals and access gates through allotments to enhance recreational mobility. <ul style="list-style-type: none"> • Not favorable, because it would be only for horse use, not all uses. If it is good for one, it should be good for all 	0	4
14.	Provide more group picnic areas near water. <ul style="list-style-type: none"> • Favorable because roads follow rivers and waterways; thus, it seems reasonable. • Not favorable because water areas are sensitive for wildlife and we need to protect them from contamination. • Is there a need for more picnic areas near water? Probably yes, because if they were provided, they would be used. 	0	5
15.	Provide an outdoor educational facility in a beneficial location.	0	2
16.	Do not pursue additional recreation fee collection. <ul style="list-style-type: none"> • The words "do not" caused confusion when placing the dots. Overall feeling is that all users should pay equally. 	2	2
17.	Increase management of hunting.	2	1
18.	Provide education and incentives to involve the public in reducing conflict and protecting resources. <ul style="list-style-type: none"> • Very favorable, absolutely necessary. 	12	0

Travel Management

Issue Definition

Increasing recreational use has resulted in more travel among different user groups. The issue of travel management focuses on the degree and types of access to be developed through trail and road systems and cross-country areas of the San Juan National Forest. It focuses on how travel conflicts can be minimized, whether through education and/or other methods. It also addresses the effects of various modes of travel and human activity impacts on wildlife and erosion. While no single solution will fit the entire forest, some travel areas may be shared by mixed uses, while other uses because of their unique impacts, may need to be separated.

Presentation Summary

The Forest Plan is an opportunity as the principle way to establish future direction for travel management.

History

Many current travel guidelines had evolved before the first Forest Plan (1983). Site-specific decisions required only the forest supervisor's signature to authorize. The revised Plan does not automatically erase those decisions. However, it is a chance to review current situations and make needed changes.

Visitor maps

Topography across the SJNF has largely determined the types and amount of travel. The flatter west side is more accessible than the steeper, more rugged east side.

The forest visitor map is the single most important tool people have to learn where certain types of travel are available on the SJNF. By referring to the map's legend, you can find out what seasonal or year-round restrictions are for any mode of travel.

There are two types of closures: area closures and road and trail closures; however, travel management is more than directing motorized and non-motorized travel. *Management prescriptions* set by the Forest Plan determine the map's contents. The Recreational Opportunity Spectrum (ROS) must be weighed with wildlife needs, timber sales, vegetation management, and other requirements of the Forest Service. Many travel restrictions result from balancing those needs.

The San Juan generally has fewer travel conflicts than other Rocky Mountain Region forests. Most complaints are related to ATV use that occur during hunting season.

Types of conflicts

Social conflicts have gained increasing attention simply because increasing numbers of people use the forest.

Conflicts include: ATVs and hikers and hunters on foot; wilderness hikers and equestrians; snowmobiles and cross-country skiers; mountain bikes and hikers; winter wildlife range and motorized vehicles.

New state law

Colorado recently legislated to allow off-road vehicles on roads with proper licenses, if authorized by the Forest Service in its jurisdiction.

Discussion Questions

- Identify an area where access or travel is a concern to you and mark its location on the map.
- Define this concern by describing the particular type of travel which you believe should be continued or discouraged with that area.
- Propose a travel management solution. How would you approach a solution that addresses all access concerns?

Travel Management

Pagosa

Important Values

- motorized uses
- snowmobile access
- economic contributions of hunting and ATV use
- wilderness
- safety
- signage
- user-friendly maps
- conflict resolution by and among user groups

Travel Management Concerns and Approaches (Pago

	Recommendations		
	Access Restriction and Use Designation	Closures	Management A
Motorized Access	<ul style="list-style-type: none"> • Approach designating ATV use areas more comprehensively. Close trails unfeasible for ATVs (Mosca) that easily access closed areas (trails and meadows), and are difficult to monitor and enforce. • Provide some areas for increasing ATV use. • Designate ATV areas with physical barriers (e.g., a river). • Outside wilderness, don't restrict motorized use. • Provide snowmobile access since it is a modern form of trail access. • Consider historical-use patterns when setting designations. • Prohibit ATVs on gravel roads where they access closed areas. • Clarify policy/designation regarding ATV use on roads. • Analyze old Nipple Mt. Road for possible motorized use. • Link Chris Mt. and Turkey Springs roads with an ATV loop. • Consider an ATV loop at Elwood Pass area across the Rio Grande and San Juan sides, using old logging roads. 	<ul style="list-style-type: none"> • Do not allow ATVs in Pordonia Point. • Do not allow ATVs in the Devil Mountain area. • Consider closing short stretches of trail currently open to ATVs that lead straight into the wilderness. 	<ul style="list-style-type: none"> • Restrict motorized use natural boundaries in o simplify management a users' ability to underst restrictions, even thoug restricting controversial • Add gravel to increase : better maintain some rc boulders, bar ditches); i 638, and Turkey Spring end (629) need gravel • Don't increase road nu • Improve only dangerou (Palisades, Piedra Falls,
Motorized Resource Damage	<ul style="list-style-type: none"> • Address wet-weather damage in areas, on roads and trails. • Restrict motor vehicles to roads and trails (timber roads: OK). • Designate ATV use areas to accommodate users, prevent conflicts and protect other areas; e.g., Mosca area. 		<ul style="list-style-type: none"> • Address ATV travel sal liability (Buckles Lake, Park Roads). • Conduct trial periods ir assess motorized-travel
Wildlife and Motorized Concerns	<ul style="list-style-type: none"> • Overlap state game units with ATV use areas. • Provide ATV and non-ATV hunting areas to reduce conflicts—they both contribute to the economy. • Allow ATV cross-country game retrieval (Piedra Area). 		<ul style="list-style-type: none"> • Valle Seco: Assess ATV wildlife. • Conduct in-depth case-studies before allowing retrieval.
Non-Motorized Access	<ul style="list-style-type: none"> • Do not provide more parking space at crowded trailheads— more space will result in more users. • Allow snowmobiles on East Creek Trail—they would not impact wildlife in the area. • Segregate uses to reduce conflicts. 		<ul style="list-style-type: none"> • Improve signage to hel confusion and violatio • Maintain trails in the w minimize environment; caused by the creation ; parallel to the main trai • Make maps that are eas understand. Make area and road-and-trail table in more obvious locati

Travel Management Building Blocks (Pagosa)

- Develop a comprehensive use plan for ATVs, offering loop trails at desirable points, mitigating resource damage, preventing conflicts and resource damage.
- Provide ATV and non-ATV hunting areas.
- Segregate uses to reduce conflict.
- Use natural physical boundaries to control motorized uses.
- Mitigate ATV impacts on wildlife.
- Restrict ATV use in sensitive resource areas.
- Create more user-friendly recreation maps, visitor information.
- Encourage the development of collaborative partnership groups to resolve user conflicts, and to increase land stewardship.
- Consider historic-use patterns when setting land-use designations.

Travel Management Building Block Summary

	Pagosa	Blue	Red
1.	Develop a more comprehensive use plan for ATVs, offering loop trails at desirable points, mitigating resource damage, preventing conflicts and resource damage. <ul style="list-style-type: none"> • Building block #1 says it better than #2. 	13	1
2.	Provide ATV and non-ATV hunting areas.	1	3
3.	Segregate uses to reduce conflict.	2	11
4.	Use natural physical boundaries to control motorized uses	6	0
5.	Mitigate ATV impacts on wildlife. <ul style="list-style-type: none"> • Don't know what it means to "mitigate." It means to compensate for something you're doing, but how do you do that? It makes more sense to say "prevent" harmful ATV impacts on wildlife. 	2	2
6.	Restrict ATV use in sensitive resource areas. <ul style="list-style-type: none"> • Not favorable, because "sensitive areas" need to be better defined. • Not favorable, rather than "restrict", uses should be mitigated. For example, if there is a road through a sensitive meadow, there should be signs and other mitigation to protect the area, but do not restrict access. 	6	1
7.	Create more user-friendly recreation maps and visitor information. <ul style="list-style-type: none"> • Add word, "signage". 	11	0
8.	Encourage the development of collaborative partnership groups to resolve user conflicts, and to increase land stewardship. <ul style="list-style-type: none"> • As part of the plan, I believe in it; but it would hard to implement. • The only way the process will work is to buy into it. 	10	0
9.	Consider historic-use patterns when setting land-use designations.	9	7

Travel Management

Columbine

Important Values

- non-motorized use
- motorized use
- solitude
- separate trails for cross-country skiers and snowmobilers
- motorized use on roads
- barrier-free trails
- loop trails
- controlled trailhead access
- seasonal closures
- specific site closures
- mid-elevation diversity
- sensitive wildlife range
- areas with proximity to wilderness
- buffer areas
- wildlife migration routes
- water resources
- group size in wilderness
- interpretative opportunities
- hunting regulations
- monitoring and enforcement

Travel Management Concerns and Approaches Matrix (Col

	Recommendations		
	Access Restriction and Use Designation	Closures	Management Action
Motorized Access	<ul style="list-style-type: none"> • Categorize motorcycles and ATVs the same. • Designate special trails for motorcycles. • Consider designating trails on Molas Pass to separate cross-country skiers and snowmobilers. • Hermosa and Dutch Creek Trails: restrict motorized use on trails to reduce noise disturbance, especially to wildlife. Enforce muffler restrictions at least. • Require motorized vehicles to stay on roads— It eases enforcement. 	<ul style="list-style-type: none"> • Officially close north side of Molas Pass to snowmobiles, leave open for cross-country skiers. Allow snowmobilers on the south side. • Restrict snowmobile access on Molas Pass 	<ul style="list-style-type: none"> • Require big ID numbers on AT • Give the Forest Service authorit write tickets like the CDOW. • Provide an 800 number to repor violators. • Appropriate more money for monitoring and enforcement. • Increase fines from \$50 to \$100 • Enforce wilderness boundary or south side of Molas from snown • Clarify official boundary at high
Motorized Resource Damage	<ul style="list-style-type: none"> • Bolam Pass: Require mountain bikers, hikers, and motorized users to stay on trails and roads, not in meadows. • Don't allow mechanized/motorized vehicles to go wherever they want on forest. • Restrict vehicles to existing roads and trails. • Restrict ATV opportunities to existing roads. • Create a buffer in the Piedra Area to prevent snowmobiles from getting into Johnny Canyon through Baldy Mountain (snowmobiles acceptable on Baldy Mt., not in canyons.) 	<ul style="list-style-type: none"> • Establish seasonal closures to motorized vehicles (muddy spring and fall). • Address vehicles rutting in wet weather. • Use only site-specific closures. • Keep Bolam Pass closed to motorized vehicles to protect sensitive alpine areas. • Close Mosca Road at the Weminuche Valley Ranch and Beaver Meadows Road at the switchbacks to protect the mid-elevation biodiversity. • Close Mosca and Beaver Meadows Road. Keep for restoration timber management and to regenerate clear cuts. Let nature manage old growth. • Close East Creek trail in poor snow conditions. 	<ul style="list-style-type: none"> • Enforce current regulations to p • ATV users from creating new tr
Wildlife and Motorized Concerns	<ul style="list-style-type: none"> • Disappointment Valley: reduce vehicle activity on adjoining National Forest and BLM sensitive wildlife range during winter. • Falls Creek: restrict snowmobiles, they disturb game. • Do not allow ATV game retrieval. If you do, allow only from 10 a.m. to 2 p.m.; not from noon to dark. 	<ul style="list-style-type: none"> • Consider seasonal closures to protect winter wildlife corridor and habitat on Westside. • Close North Park timber sale roads to improve hunting and increase solitude. • Close and obliterate Mosca Road at the Weminuche Valley Ranch and Beaver Meadows Road at the switchbacks to protect wildlife migration routes. • Close East Cr. Trail to all motorized traffic, including snowmobiles to protect bull-elk wintering area. 	

<p style="text-align: center;">Non-Motorized Access</p> <p>[user conflicts, resource protection, etc.]</p>	<ul style="list-style-type: none"> • Control access at road- and trailheads. • Protect the value of solitude for hiking trails, by restricting mechanized and motorized use. • Develop a loop trail system west of La Plata Canyon to Transfer Park area. • East Creek: develop trail as an alternative for snowmobiles. • Elbert Creek, Big Lick: eliminate mountain bikes where rutting causes silt and erosion. • East Creek: make it a candidate for wilderness. <p>User Conflict</p> <ul style="list-style-type: none"> • Change prescriptions where mountain bikes are dangerous for hikers and equestrians. • Keep the Colorado Trail as non-motorized up to the Continental Divide. 	<ul style="list-style-type: none"> • Close Haflin Canyon Trail to mountain bikes. • Lower Colorado Trail (first five miles; at least to Gudie's Rest Area): set aside for hikers and close to mountain bikers. 	<ul style="list-style-type: none"> • Upper Hermosa: Enforce hunting regulations. Large private hunting parties are too big and camp near
<p style="text-align: center;">Wilderness</p>	<ul style="list-style-type: none"> • Middle Mountain—Change ROS designation to not allow access to motorized vehicles because of the proximity to wilderness. 	<ul style="list-style-type: none"> • Close Poison Park trail from motorized vehicles in order to keep them from illegally entering the wilderness. 	<ul style="list-style-type: none"> • Address hunting and entering the wilderness violations done by our ATV users. • Enforce 25 heartbeat regulation Vallecito Reservoir, Pine River, Lake Eileen Trails into the wild especially during hunting season money outfitter groups are causing resource impacts.
<p style="text-align: center;">General</p>			

Travel Management Building Blocks (Columbine)

- Designate special trails for motorized vehicles.
- Designate separate trails to avoid user conflicts
- Restrict motor-vehicle noise disturbance on trails.
- Restrict motorized uses to roads.
- Restrict motorized uses in winter range.
- Establish seasonal closures to avoid resource impacts in muddy season.
- Encourage interagency cooperation.
- Monitor to determine if technological impacts are greater than biological.
- Set aside specific areas for hikers.
- Restrict bikers in areas where danger to hikers and horses can occur.
- Restrict snowmobile uses to protect wildlife in selected areas.
- Protect the value of solitude on hiking trails.
- Expand wilderness to include East Fork *Trail* area.
- Do not allow motor vehicles in close proximity to wilderness.
- Protect areas adjacent to wilderness from concentrated recreation uses.
- Disperse recreation users to avoid resource impacts.
- Utilize education and negotiation to address travel-user conflicts.
- Provide more barrier-free trails for handicapped access.
- Restrict group access to wilderness trails to 25 heartbeats.

Travel Management Building Block Summary

	Columbine	Blue	Red
1.	Designate special trails for motorized vehicles.	2	3
2.	Designate separate trails to avoid user conflicts <ul style="list-style-type: none"> • Not favorable, because segregating trails may result in a proliferation of trails in the same area for different uses. Rather, utilize #17 to address user conflicts 	2	7
3.	Restrict motorized noise disturbance on trails.	5	0
4.	Restrict motorized uses to roads. <ul style="list-style-type: none"> • Not favorable, because it is too restrictive. 	7	1
5.	Restrict motorized uses in winter range.	4	0
6.	Establish seasonal closures to avoid resource impacts in muddy season.	6	0
7.	Encourage interagency cooperation.	5	0
8.	Monitor to determine if technological impacts are greater than biological.	3	0
9.	Set aside specific areas for hikers.	2	1
10.	Restrict bikers in areas where danger to hikers and horses can occur.	2	0
11.	Restrict snowmobile uses to protect wildlife in selected areas.	4	0
12.	Protect the value of solitude on hiking trails.	2	0
13.	Expand wilderness to include East Fork area. <ul style="list-style-type: none"> • Not clearly written... Refers to the East Fork Trail and whether or not motorized access should be allowed in the winter (snowmobiles). • Not favorable, because there is already enough wilderness. 	5	3
14.	Do not allow motorized vehicles in close proximity to wilderness.	3	0
15.	Protect areas adjacent to wilderness from concentrated recreation uses.	0	0
16.	Disperse recreation users to avoid resource impacts.	3	0
17.	Utilize education and negotiation to address travel-user conflicts.	7	0
18.	Provide more barrier-free trails for handicapped access.	1	3
19.	Restrict group access to wilderness trails to 25 heartbeats. <ul style="list-style-type: none"> • 25 heartbeats are too few (40). Getting a sense that we're beginning to separate ourselves by our uses. Current users have preferred trails and don't want to lose them. 	1	6

Need to add a building block that addresses road closures, especially since the Columbine District is more or less a non-motorized district.

- Not in favor of closures because there are enough roads already closed.
- Need to understand the motive or reason for closures that effects whether the closure is acceptable or not. [For example, #6 is acceptable.]
- Distinguish between district and forestwide closures.

Travel Management

Dolores

Important Values

- firewood gathering
- elk calving areas
- free access
- multiple use
- seasonal road closures
- open access to the forest
- enforcement of current rules
- user ethics
- public education
- clear trail map
- sensible road closures
- improved, comprehensive signage
- cooperative partnerships among conflicting user groups

Travel Management Concerns and Approaches (Dolor

	Recommendations		
	Restrictions and Designations	Closures	Management Actions
Motorized Access	<ul style="list-style-type: none"> Do not allow helicopters. Prohibit off road/trail cross-county travel. Discontinue area prescription F—allow only road and trail travel (Plateau Cr., FS Road 523). Stoner Mt.: Address trail/road ATV designation conflicts. Increase access to old logging roads to road-only use. Haycamp Mesa: allow firewood gathering access using sale roads. 	<ul style="list-style-type: none"> Closures are not the answer. Losing access to forest on a year-round basis is not acceptable, except for hunting season closures. Consider closing certain roads seasonally, especially to provide quality hunting. Do not close roads. Don't partially close a timber road after sales. Leave it open or completely eradicate it, even the grade. Close some old timber roads in the Boggy Draw and Glade area that parallel each other (seasonally and year round). 	<ul style="list-style-type: none"> Enforce current rules before opening up new areas. Don't add areas for motorized use until it is manageable and enforceable. Stoner Mesa Road-Taylor Mesa: enforce ATV restrictions remove the signs that are continually violated during the hunting season. ATVs are threats to hunters on foot. Little Fish, Lone Dome, and Willow Divide Road: enforce closures with physical barriers. Put gate at the end of Thomas Mt. Road to keep full-size vehicles out. FS Road 500: use physical barriers to address road problems.
Motorized Resource Damage	<ul style="list-style-type: none"> Stoner Mesa: allow ATV access on road. Keep open, except during wet weather (it cost a lot to build and should be used). Don't open road to ATVs on Stoner Mesa. Restrict 4WDs in poor conditions. 	<ul style="list-style-type: none"> Consider closures to FWDs, leaving open to ATVs which do less damage. Close Priest Gulch and Calico Trails to motorcycles and ATVs—they cause damage on steep trails. Do not close Priest Gulch and Calico Trails trail to Off Road Vehicles. Close Bear Creek trails to motorcycles and ATVs to stop trail damage, protect calving and resource above timberline. 	<ul style="list-style-type: none"> Use physical barriers and signs on roads to enforce closures and protect resource.
Wildlife and Motorized Concerns	<ul style="list-style-type: none"> Restrict vehicles at Groundhog Point and Nipple Mountain to protect elk calving. Restrict ATVs where they disturb wildlife or chase elk onto private property (e.g., Groundhog and Disappointment). Restrict motorized and mechanized use to protect East Fork and Highland Trails calving. 	<ul style="list-style-type: none"> Close Bradfield Bridge to motorized vehicles for winter range. 	<ul style="list-style-type: none"> Ryman Creek and Glade Mt.: enforce a winter habitat closure with a gate at Disappointment Creek. Allow retrieval only if it can be enforced and ATVs stay on trails and roads.

	<ul style="list-style-type: none"> • Allow ATV retrieval in certain areas. • Allow retrieval between 10 a.m.-2 p.m. 		
General	<ul style="list-style-type: none"> • Allow free access to problem-free areas. • Do not segregate, exclude, or specify uses for trails, roads, or areas. Specifying will only bring more users to that area. • Clear older trails for access, maybe volunteer maintained. • Don't clear down trees on the East Creek Trail in order to stop summer violations, but allow snowmobiles in the winter. • Jackson Creek: Keep multiple use, don't segregate uses. <p>User Conflicts</p> <ul style="list-style-type: none"> • Keep multiple use trails; respect other users. • Restrict motorized and mechanized use to minimize dangerous encounters on the steep terrain on the East Fork and Highland Trails, (e.g., mountain bike and horse encounters). 	<ul style="list-style-type: none"> • Confer with users on case-by-case basis before closing a road or a trail. 	<ul style="list-style-type: none"> • Increase and improve enforcement, user ethics, and enforced seasonal closures to protect resource. • Increase violation fines to \$1,000 or even \$5,000. • Increase the number of enforcers. • Create a self-policing program with a phone number to report offenders and a reward for turning in offenders. • Do not use volunteers to enforce restrictions (impractical and unsafe). • Provide improved and comprehensive signage, directing use on trail and roads only. • Allocate more money to train USFS law officers.

Travel Management Building Blocks (Dolores)

- Prohibit off-road, off-trail cross-country travel.
- Keep roads open except during wet weather.
- Restrict ATV disturbance of wildlife.
- Allow free access to problem-free areas.
- Retain multiple-use trails while respecting each other's travel option.
- Gather case-by-case public input from users prior to a road or trail closure.
- Increase and improve enforcement and user ethics to protect resources.
- Utilize public awareness and education campaigns.
- Reduce road density.
- Provide a comprehensive improved signage program.
- Emphasize voluntary and educational solutions to address road, trail closures to protect resources.
- Pursue cooperative partnership among conflicting user groups.

Travel Management Building Block Summary

	Dolores	Blue	Red
1. Prohibit off-road, off-trail cross-country travel		2	9
• Not favorable, because there needs to be compromise to open some roads, then closing others would be more acceptable. Currently there are some "F" areas that have many closed roads.			
• Not favorable, because this limits use of the forest and there are too many non-enforceable rules already. It's OK to close during wet weather, though.			
2. Keep roads open except during wet weather.		7	1
3. Restrict ATV disturbance of wildlife.		2	3
4. Allow free access to problem-free areas.		4	3
5. Retain multiple-use trails while respecting each other's travel option.		10	0
6. Gather case-by-case public input from users prior to a road or trail closure.		9	0
• Favorable, ask for public input.			
7. Increase and improve enforcement and user ethics to protect resources.		2	3
8. Utilize public awareness and education campaigns.		4	0
9. Reduce road density.		4	3
10. Provide a comprehensive improved signage program.		2	2
11. Emphasize voluntary and educational solutions to address road, trail closures to protect resources.		4	0
12. Pursue cooperative partnership among conflicting user groups.		6	0
• Wherever possible, simplify the system; streamline where you can.			
• Number 5 and # 12 are close to the same thing.			

Range

Issue Definition

Range resources serve a variety of purposes: social, economic, historic, ecological, and biological diversity. This issue focuses on the question of how to preserve vegetation, water, wildlife forage, and other natural resource values while providing sustainable opportunities for ranching and grazing. It further focuses on sustaining and balancing all these uses within a multiple-use policy and Forest Service mandates pertaining to grazing.

Presentation Summary

National Forests are required by the Recision Act to complete "Allotment Management Plans"(AMPs) by the year 2010. A range analysis and AMP planning is on-going on the SJNF. Factors such as market prices and increased recreation use have resulted in reduced stock numbers on the SJNF. Sheep have been reduced 45 percent on the old Animas District since 1980.

There are 124 allotments on the SJNF and 129 permittees. The revised Forest Plan may analyze closure of some vacant grazing allotments. The Forest Service will first examine allowing an allotment to continue being vacant rather than closing it. (The process by which closure occurs is different than just calling it vacant.)

Forty percent of Pagosa Ranger District allotments are yearling cattle. Yearlings cover more ground to graze and require more intensive management – more fences, etc.

Spring grazing by cattle impacts the habitat of the southwest willow flycatcher, an endangered specie, because vegetation is less palatable.

There are two range planning levels: AMPs and the Forest Plan. The Forest Plan provides general direction, while AMPs are site specific. All AMPs must comply with the Forest Plan.

Range conservationists seek cooperative relationships with range permittees to adapt to budget and personnel cuts and to perform analyses. Approaches include: monitoring and evaluation and training permittees; annual reviews of range practices.

Some examples of conflicts involving livestock grazing include domestic stock and wildlife competition for vegetation, domestic sheep and bighorn sheep common-area use, use of riparian areas, and conflicts involving recreation users.

Capability and Suitability

Range managers analyze capability (forage that has inherent grazing characteristics if the features are there that make it grazable) and suitability (appropriateness for grazing an area) for the Forest Plan, which provides general guidelines and standards on which uses to emphasize where.

Suitable lands can fall into three categories.

1. Primary: the areas easiest to reach and most preferred by livestock. Capacity is assigned.
2. Secondary: used after primary areas have been grazed. No capacity is assigned.
3. Transitory: areas that have been logged. The open canopy which promotes forage growth will be reclaimed by forest, reducing forage. No capacity is assigned.

Grazing Permits

Current fees of \$1.35 per head month do not finance range programs. Permittees are expected to incur the cost of proper allotment management; for example, fencing maintenance. Communities benefit from the economic activities of livestock grazing. Twenty-five percent of fees is returned to the county where they were incurred. Only Congress has authority to set fees.

Permits can be obtained in one of several ways: by inheritance, or through purchase of permitted livestock, or of base property. A fourth way is through a process of granting a permit on a vacant allotment . Permittees must be the head of a household; cannot be member of Congress; must own sufficient base property. Permits are issued for 10 years, but the Forest Service can terminate or reissue them.

Discussion Questions

1. How can rangelands best be managed to provide sustainable outputs and retain rangeland resource values?
2. What grazing levels and strategies meet your perceptions of what desired conditions should be in areas such as: riparian zones, designated wilderness, and alpine vegetation types.
3. What range practices do you want to see on the SJNF? Which ones would you like to see discontinued or changed?

Range

Pagosa

Important Values

- open allotments for flexible rotation
- Rocky Mountain bighorn sheep (Wolf Creek)
- winter range
- partnership agreements
- good science
- willow flycatcher habitat
- weed eradication
- public education
- riparian areas
- aspen regeneration
- proper use of allotments
- hunter education
- traditional uses of range

Range Concerns and Approaches Matrix (Pagosa)

	Recommendations		
	Resource Allocation	Active Management	Cooperati (n)
Range Allotments Grazing Practices	<ul style="list-style-type: none"> • Reduce stocking levels in steep country to improve forage where damage is due to congregation. • Keep open allotments for rotation away from resource-problem areas, allowing them to rest in bad years. • Eliminate resource damage from motorized use, concentrated large groups, recreation, and cattle (Blue, Blanco, Mill Creeks, V Rock, and Williams Lake areas). • Continue with current allotments, unless serious damage occurs. 	<ul style="list-style-type: none"> • Require more field riders. • Require permittees to move herds to keep areas productive. • Sustain allotments through proper use. • Rest allotments where aspen are trying to regenerate. 	<ul style="list-style-type: none"> • Create flexibility for future options. • Create partner allotments. • Educate public
Riparian	<ul style="list-style-type: none"> • Return tributaries of Piedra River to multiple use from wild and scenic proposal. 	<ul style="list-style-type: none"> • Every management practice should address riparian-area stream banks and erosion. • Protect drainages; disperse and change time of uses. 	<ul style="list-style-type: none"> • Establish good riparian areas to obtain more cover • High water capacity
Grazing and Recreation	<ul style="list-style-type: none"> • Keep cattle away from popular trails in wilderness. 	<ul style="list-style-type: none"> • Keep cattle out of campgrounds. • Put in cattle guards on open 4x4 roads. • Manage for recreation-horse damage, not only cattle. 	<ul style="list-style-type: none"> • Inform recreation users of potential conflicts. • Use signs to manage recreation area during seasons
Grazing and Wildlife compatibility, competition	<ul style="list-style-type: none"> • Keep domestic sheep away from wild sheep (Wolf Creek). • Keep winter range allocation the same. • Cut elk number to equal cattle numbers. 	<ul style="list-style-type: none"> • Fertilize in correct areas to keep wildlife there in winter. 	<ul style="list-style-type: none"> • Educate hunters to purchase their own
Weeds		<ul style="list-style-type: none"> • Control weeds (larkspur at Saddle Mountain). 	<ul style="list-style-type: none"> • Use volunteers • See both pros and cons • Biological control
General Range Conditions		<ul style="list-style-type: none"> • Hold cattle in upland areas away from riparian areas and private land. • Create and enlarge ponds to store more water. • Burning is acceptable. • Need more riders on allotment. • Fences are good in remote areas, but expensive and difficult to build. • Managing vegetation to improve land is okay even if visual appearances are altered temporarily. • Use logging to improve forage. 	<ul style="list-style-type: none"> • Fertilizer is quite expensive and attracts elk • Combine adaptive management with other goals and objectives • Continue studies

Range Building Blocks (Pagosa)

- Reduce stocking levels in steep country where damage is due to livestock herding.
- Eliminate resource damage due to motorized uses, large recreation-group campsites, and overgrazing.
- Retain current level of winter range allocation.
- Create a flexible plan that does not foreclose future options.
- Create partnership agreements through which permittees can monitor their allotments.
- Conduct good scientific analysis to lay solid ground work for support of endangered species law.
- Educate public about allotments, stock on roads, and traditional grazing uses.
- Require more active range-management practices to protect riparian areas, keep cattle out of campgrounds, using more cowboys if necessary.
- Keep domestic sheep away from wild sheep.
- Keep cattle away from popular wilderness trails.

Range Building Block Summary

	Pagosa	Blue	Red
1.	Reduce stocking levels in steep country where damage is due to livestock congregation.	6	3
2.	Eliminate resource damage due to motorized uses, large recreation group campsites, and overgrazing. <ul style="list-style-type: none"> • Appears to be more of a travel management issue. • Do not like the word eliminate, rather say “minimize,” and do not say overgrazing. Overgrazing should not occur, rather, say “grazing”. • Take out other issues and reword to say: Minimize resource damage due to grazing. 	9	2
3.	Retain current level of winter range allocation.	4	1
4.	Create a flexible plan that does not foreclose future options.	9	1
5.	Create partnership agreements through which permittees can monitor their allotments.	8	1
6.	Conduct good scientific analysis to lay solid ground work for support of endangered species law. <ul style="list-style-type: none"> • It is important to what we are doing. Many decisions now are not based on good science, e.g., protecting a species where habitat does not exist— CDOW probably poisoned water that flowed downstream and killed squawfish. • Use a scientific approach versus the philosophical to make decisions— do your homework. 	7	3
7.	Educate public about allotments, stock on roads, and traditional grazing uses.	10	0
8.	Require more active range-management practices to protect riparian areas, keep cattle out of campgrounds, use more cowboys if necessary. <ul style="list-style-type: none"> • Building block should include or specify using fences, because fencing is a crucial range management factor, much more than cowboys, which are hard to come by. 	4	3
9.	Keep domestic sheep away from wild sheep and cattle away from popular wilderness trails. <ul style="list-style-type: none"> • Ensure domestic and wild sheep are separated by closing the allotments on Sheep Mt. (Disease is an issue on several allotments in the Weminuche and the South San Juan.) • I take offense at keeping cattle away from popular wilderness trails. Hikers should put up with cattle. • It may not be a problem in wilderness but may be in roadless areas. • Move cattle to vacant allotments. • It just will not work to keep livestock separated from trails in Williams Creek. The valley is too narrow. • Not a good building block because it includes two separate ideas. • Not favorable, because cattle do less damage than the same number of horses. Also, cattle dislike humans and will move away. 	4	6

Range

Columbine

Important Values

- comprehensive range management
- appropriate management through rest and rotation
- appropriate hands-on management
- permittee land stewardship and monitoring
- native grasses
- weed control
- wildlife benefits of range program, or value of allotment infrastructure for wildlife (ponds)
- balanced use between grazing and wildlife habitat
- sustainable range conditions
- riparian areas
- water quality
- economic benefits
- cultural resources
- user conflict reduction

Range Concerns and Approaches Matrix (Columbir

	Recommendations	
	Resource Allocation	Active Management
Range Allotment and Grazing Practices	<ul style="list-style-type: none"> • Stop grazing sheep in the wilderness. • Do not close allotments; leave as vacant reserves to rest other allotments. • Maintain existing infrastructure. 	<ul style="list-style-type: none"> • Don't graze sheep above timberline, but still accommodate permittees. • Encourage local governments to enforce local properties (counties and private) to use native grasses to control the weed problems. • Require rotation and stock reductions. If permittees don't follow, close allotments. • Maintain existing range infrastructure. • Use riders to keep cattle from moving upcountry before grasses are ready instead of costly fencing. • Continue seeding to restore native vegetation. • Use intensive grazing to increase the grass diversity. • Middle Mountain Road–Bear Park: actively manage, possibly restrict uses to restore vegetation and reduce noxious weeds.
Riparian	<ul style="list-style-type: none"> • Use Sauls Creek as a rotational allotment with other areas that need to be rested and restored. • Stop cattle threat to spawning fish (Pagosa RD, cutthroat on the Hermosa and Bear Creek.) 	<ul style="list-style-type: none"> • Dutch Creek and Elbert Creek: distribute and rest rotate cattle properly towards a goal of overall sustainable conditions. Include elk and horse damage in analysis and management. Build more fences and use intensive grazing. Require permittees to use more full-time riders and proper salting. Build ponds to keep cattle out of stream bottoms. • Stevens Creek to Sheer Creek: address cattle, biking, horses, hunting, trails across creek impacts. • Allow re-vegetation by resting for one to two years (Stevens Cr.). • Spring Creek in the HD Mountains: treat sensitive plants. There are no bunch grasses. Poor condition from past heavy grazing. Fertilizing may keep elk in the area too long, adding to impact. • Sauls Creek: treat range, which is in poor condition, from heavy grazing. Keep cattle out of bottom. • Address impacts from logging chasing cattle into riparian areas. Fence and/or more riders.
Grazing and Recreation	<ul style="list-style-type: none"> • Consider stock reductions at Purgatory Flats and Cascade Creek 	<ul style="list-style-type: none"> • City Reservoir: keep sheep on other side of ridge, to avoid conflicts with recreationists. • La Plata Canyon: keep cattle from entering campsites. • Explore trail guards as alternatives to gates. • Address recreational horse use on trails and at trailheads.

<p>Grazing and Wildlife (compatibility, competition)</p>	<ul style="list-style-type: none"> • South San Juan: Close vacant sheep allotments to avoid potential conflicts with native predators and habitat. • Seek better balance of three major uses in Dutch Creek— recreation, timber, grazing— while improving management practices for all. Alter shelter-wood cuts and grazing in riparian areas to treat erosion. 	<ul style="list-style-type: none"> • Mitigate cattle damage to Indian rock shelters, possibly by fencing. 	<ul style="list-style-type: none"> • • •
<p>General Range Conditions</p>		<ul style="list-style-type: none"> • Encourage local governments to require land owners to use native grasses in order to help control weeds. • Do not fertilize. • Build more fences. • Do not build more fences. Too many are undesirable. • Continue to use controlled burning for management. • Use grazing to reduce noxious weeds. • Ensure monitoring and enforcement called for in current Forest Plan. Raise the money to do so. • Improving range will require more riders, which is expensive. • Prescribe burn to improve vegetation. 	<ul style="list-style-type: none"> • • • • • •

Range Building Blocks (Columbine)

- Increase the stewardship responsibility of range permittees through monitoring.
- Sustain current stocking levels by emphasizing proper active management (rest rotation, more riders).
- Maintain range-management flexibility by keeping vacant allotments open.
- Utilize active management to protect and improve riparian areas.
- Utilize an appropriate level of infrastructure to improve range conditions (e.g., not too many or too few fences).
- Reduce the influx of noxious weeds.
- Create exclosures and natural areas to research natural or reference conditions.
- Maintain a high standard for streambank erosion.
- Use vacant allotments to phase grazing out of wilderness.

Range Building Block Summary

	Columbine	Blue	Red
1.	Increase the stewardship responsibility of range permittees through monitoring.	12	0
2.	Sustain current stocking levels by emphasizing proper active management (rest rotation, more riders). <ul style="list-style-type: none"> • The methods described in this building block are favorable, however the word “sustain” poses problems. Sustaining stocking levels may not be appropriate, they may need to be reduced. • How can you monitor more riders? If the range condition improves, then the riders are doing their job. 	6	5
3.	Maintain range management flexibility by keeping vacant allotments open.	5	2
4.	Utilize active management to protect and improve riparian areas. <ul style="list-style-type: none"> • Heavily used riparian areas need active management to restore. • Who’s active management? Permittee or Forest Service? Definition of active is not clear. Use practices & other recommendations in a combined effort with FS & permittees. 	13	0
5.	Utilize an appropriate level of infrastructure to improve range conditions (e.g., not too many or too few fences).	1	3
6.	Reduce the influx of noxious weeds.	8	1
7.	Create exclosures and natural areas to research natural or reference conditions.	4	3
8.	Maintain a high standard for stream bank erosion.	4	0
9.	Use vacant allotments to phase grazing out of wilderness. <ul style="list-style-type: none"> • Cannot phase-out without Congress’ input. • Not favorable, because grazing is a valuable wilderness resource. • Favorable because grazing is not appropriate in the wilderness, rather wilderness should be a recreation resource. 	7	6

Range

Dolores

Important Values

- reserved vacant allotments
- stream banks
- range for wildlife and livestock
- big picture including all allotments
- sharptail grouse cover
- good science
- species diversity
- flexible management
- yearly rotation including rest year
- ponds for wildlife
- permittee monitoring
- hunter education
- voluntary closures
- public relations and education
- voluntary public monitoring
- riparian area exclosures
- terrain suitability

Range Concerns and Approaches (Dolores)

	Recommendations		
	Resource Allocation	Active Management	Cooperativ (ne
Range Allotments Grazing Practices	<ul style="list-style-type: none"> • Create flexibility with vacant allotments. • Do not close any more allotments; use them as reserves for allotment rotation. • Do not take away permits. • Increase or decrease number based on poor or good forage years (wet versus dry). • Increase or decrease time on allotments as it's easier than changing livestock numbers. 	<ul style="list-style-type: none"> • Don't build fences without identifying specific problems. • If we are at a point of fertilizing, we need to determine why we have this condition/need. • Disperse and appropriately times cattle grazing in riparian rather than excluding them. • Use electric fences to rehabilitate riparian areas, laying fences down in the fall. 	<ul style="list-style-type: none"> • Look at big pictu • Realize ranchers' • Promise long-ter monitor and use • Continue to let r • Sharptailed grous energy, and mon • Can't add issues • Require and trair
Grazing and Recreation		<ul style="list-style-type: none"> • Increased numbers of forest users force cattle into small areas, injuring the ground. 	<ul style="list-style-type: none"> • Put all uses, incl basis, as is grazin • Educate hunters • Increase use of v because people r
Grazing and Wildlife compatibility, competition	<ul style="list-style-type: none"> • Manage Little Fish Creek for sharptailed grouse, since allotment is already closed. • Combine BLM, deeded and USFS lands in rotation reducing time on allotments by 50 percent. 	<ul style="list-style-type: none"> • Consider using cattle to manage for wildlife, since wild game like second growth forage. • Yearly rotation should include one year rest to reduce competition with wildlife. • Elk can be kept off private land by using Red Arrow Mine Road as transitional range. • At Haycamp Mesa and Echo Basin (below Rampart Ridge) cattle being kept on too long, leaving nothing for elk by September and October. 	<ul style="list-style-type: none"> • Create a checkerl grouse cover to r • Use seeding rath habitat. • Manage for good grouse. • Consider possibl species are reintr • Explore ways to private land.
General Range Conditions	<ul style="list-style-type: none"> • Close timber roads to allow wildlife and stock forage use. • Weeds at Fish Creek are due to lack of cattle use (allotment closed). • Actively manage to restore stream banks, revegetate forests and provide fish structures. • Continue to use oakbrush plowing to improve range for wildlife and stock.. • Assess current conditions and identify ways to improve. What guidelines will move us towards improved and desired conditions? What standards are we measuring for? 	<ul style="list-style-type: none"> • Fertilizer is not desirable. • Conduct soil tests to determine the need for fertilizer. • Fertilizer increases grass height, but is not cost effective. • Build exclosures to rehabilitate riparian areas. • Maintain nutrient cycling (removing the old/cluttered growth with new growth) to sustain productive riparian areas. • Burning does not always work. • Determine why after six years and two riparian vegetation studies, the Bear Creek allotment still does not meet suitability guidelines. 	<ul style="list-style-type: none"> • Build a long-term vegetation is decl • Use good science directed permitte • Assess current cc achieve desired c • Strive for tall gra • Experiment to fit • Prevent areas fro • Manage for resou • Manage flexibly a • Don't reduce sto • Public relations a when people lear • Encourage clubs

Range Building Blocks (Dolores)

- Maintain vacant allotments for management flexibility.
- Do not eliminate permits, but use AUM levels, rotation, time on and off as active management tools.
- Combine allotments in rotation program to reduce resource impact.
- Actively manage to restore stream banks and regenerate forest.
- Manage allotments as a whole, rather than one-by-one.
- Sustain economic investment in grazing, using incentives, good range management, realizing wildlife adaptability.
- Create selected areas for restoration of sharptail grouse habitat.
- Utilize good science, responsible management, permittee monitoring and preventative measures to improve range conditions.
- Utilize education of public and permittees to obtain cooperative stewardship, good range practice, and proper recreation use.
- Improve riparian areas by building exclosures. Use grazing as a tool for maintaining nutrient cycles by replacing old, cluttered growth with new growth to sustain productive, riparian areas.
- Manage all uses, including recreation, on the basis of terrain suitability.
- Increase use of voluntary closures, based on community cooperation.

Range Building Block Summary

	Dolores	Blue	Red
1.	Maintain vacant allotments for management flexibility. <ul style="list-style-type: none"> Favor vacant allotments, but opposed to closing allotments. Practically speaking, there is not a lot of possibilities or opportunities to manage “vacant” allotments on the Dolores District. 	8	0
2.	Do not eliminate permits, but use AUM levels, rotation, time on and off as active management tools.	7	1
3.	Combine allotments in rotation program to reduce resource impact.	2	1
4.	Actively manage to restore stream banks and regenerate forest.	4	1
5.	Manage allotments as a whole, rather than one-by-one. <ul style="list-style-type: none"> No, because there are different needs at different elevations. Flexibility can be positive “if it works.” Cannot rotate large allotments like you can smaller ones. 	3	3
6.	Sustain economic investment in grazing, using incentives, good range management, realizing wildlife adaptability.	9	0
7.	Create selected areas for restoration of sharptail grouse habitat. <ul style="list-style-type: none"> The possibility of trying to protect a vanishing species while the CDOW allows it to be hunted is a concern. May already have the habitat if the proposal is to improve habitat. Habitat improvement is acceptable, but if the CDOW just wants to reintroduce, then they should cooperate with the community. Unclear issue, so tendency is to not support. Effects on existing species are not clear. 	0	6
8.	Utilize good science, responsible management, and permittee monitoring and preventative measures to improve range conditions. <ul style="list-style-type: none"> Both #6 and #8 must have monitoring and enforcement in order to work. Favorable because it is hard to argue with the concept. Poor conditions result when this does not occur. Favorable, perhaps increase enforcement with penalty for failure to comply. So often science is bent to fit people’s emotions. Monitoring is the best thing the Forest Service has come up with to see good science 	9 (4,5)	0
9.	Utilize education of public and permittees to obtain cooperative stewardship, good range practice, and proper recreation use.	6	0
10.	Improve riparian areas by building exclosures.	2	2
11.	Use grazing as a tool for maintaining nutrient cycle by replacing old, cluttered growth with new growth to sustain productive, riparian areas.	1	1
12.	Manage all uses, including recreation, on the basis of terrain suitability. <ul style="list-style-type: none"> Confusing because could be interpreted to mean have all uses in all areas. 	2	1
13.	Increase use of voluntary closures, based on community cooperation. <ul style="list-style-type: none"> Confusing, sounds more like a travel management concern. 	1	3

Wildlife

Issue Definition

Forest lands provide important habitat for many types of wildlife, including some threatened, endangered, and sensitive species. Inherent values of wildlife are commonly accepted.

Wildlife populations are dynamic, not static. They are affected by natural and human factors, such as fire and fire suppression, timber harvesting, grazing, and recreation. Forest habitat is even more important due to increasing loss of habitat on private lands.

This issue focuses on balancing competing multiple uses with their impacts on wildlife in order to benefit and sustain wildlife habitats.

Presentation Summary

The US Forest Service is responsible for habitat and for maintaining minimum viable populations of native and desired non-native species. Colorado Division of Wildlife is responsible for the animals themselves, including stocking, hunting, and trapping regulations. A “Memorandum of Understanding” with the USFS authorizes it to reintroduce species. US Fish and Wildlife Service enforces the Threatened and Endangered Species Act (TES).

There are six TES species currently listed on the SJNF. Nearly 30 other species are “sensitive” and managed, to try and save them from the TES list. Neotropical migratory birds are drastically declining, due to several factors.

Reference Conditions of Three Forest Types

Most pinon and juniper is on the west side of the SJNF. Ponderosa and spruce-fir spans all ranger districts. Canyons, such as those found in the Lower Dolores River, are important habitat for spotted bats, ringtail cats (sensitive), black bear, and Mexican spotted owl.

Natural-fire frequency was 30-50 years in pinon-juniper forests.

A history of range use has hurt wildlife habitat. Early this century there were three times more cattle on the forest than now. Little was done to improve conditions. Soils were lost; vegetation was removed. Now, however, range is improving with various projects, although not all areas have recovered to pre-settlement conditions.

Much original range has been overgrown by forest, created by the lack of fire.

Sharptail Grouse

The Glade area (Dolores RD) is historical sharptail grouse habitat— a TES candidate. The CDOW may reintroduce it. Grouse were widely distributed around 1900, but began to disappear from the 1940s to 60s. The last evidence of them was found in 1984.

Reasons for grouse extirpation are not clear, probably loss of habitat caused by: lack of natural fire that would create proper habitat, grazing, and herbicide spraying that reduced important sage fields and increased undesirable forage.

Sharptails need less sage than existed in the 1950s when the USFS sprayed to control sage for grazing, not for the sharptail. The result was too little sage, a condition that is still prevalent.

Ponderosa Pine

Snags

The current Plan calls for two to three snags per acre forestwide, but there is less than one. Snag size and quantity are both important for wildlife habitat. Pigmy Nuthatches (sensitive), pigmy owls, five bat species, and 10 other common cavity nesters use snags. Aspen makes a good cavity tree for species, such as the red-naped sapsucker.

Once considered fire hazards and cut, snag removal is prohibited, but people still take them.

Recreation and wildlife

Concern over increased winter recreation has grown because disturbance reduces ability of wildlife to survive.

Habitat Fragmentation

Fragmentation is the process by which habitat is increasingly subdivided until pockets become isolated.

Patches are isolated habitat areas. Patch size relates to the Forest Plan prescription. It is difficult to guide management of small areas to benefit wildlife.

Edge Effect

Altering or creating edges affects various species.

Aspen

Having old growth aspen is less important for species than having large patches and enough nesting cavities, which occur more in old aspen forests. Maybe half of all species on the SJNF use aspen some time during the year. The same is probably true of spruce-fir.

Discussion Questions

- Are there areas that you think should be given special wildlife emphasis?
- Give examples of how these areas would be managed?
- Discuss wildlife and recreation conflicts in your area.
- What are your thoughts on reintroduction and recovery of species, including predatory animals?
- How do you feel about the SJNF more aggressively restoring snag habitat?

Wildlife

Pagosa

Important Values

- willow flycatcher
- goshawk
- leopard frogs
- peregrine falcon nest sites
- turkey
- bighorn sheep
- mule deer
- horned lizards
- elk migration corridors
- critical winter range
- seasonal wildlife closures
- developed “grass banks” for future forage needs
- riparian use by wildlife
- monitoring
- flexibility to change
- public education and incentives

Wildlife Concerns and Approaches Matrix (Pagosa)

	Recommendations			
	Wildlife Designations and Prescriptions	Closures, Restrictions and Access	Vegetation Management	M
Habitat Riparian, TES, and Winter Range	<ul style="list-style-type: none"> • Protect south of Williams Lake for willow flycatcher. • Emphasize Martinez Creek for goshawk and leopard frogs. • Emphasize West and East Forks of the San Juan River for peregrine falcons. • Emphasize Devil Creek, Devil Mountain for lions to attract away from Chimney Rock. • Emphasize Jackson Mt. Wildlife area for turkey and species other than big game. • Emphasize Fish Lake, head of the Navajo River for bighorn sheep. • Protect high-mountain meadows for suitable boreal toad habitat. • Emphasize Fish Creek for bighorn. 	<ul style="list-style-type: none"> • Do not create blanket closures or openings—management should be flexible and specific to an area. 	<ul style="list-style-type: none"> • Fertilize to enhance vegetation. Fund with a conservation stamp on hunting licenses. • Manage grazing with regard to winter range, e.g., during a drought year, restrict cattle in order to prepare for winter wildlife habitat. • Consider using “grass banks” to plan for future forage needs. • Manage/prioritize productive riparian areas—they provide habitats for high concentrations of wildlife. 	<ul style="list-style-type: none"> • B • w • T • d • Si • s • A • b • A • in • fc • b • S • th • di • G • ra • re • M • fl
Wildlife Dispersal and Migration Routes	<ul style="list-style-type: none"> • Identify and protect wildlife corridors in order to prevent fragmentation caused by development. • Protect the East Fork corridor. • Protect elk migration routes on O’Neal Hill in the fall—currently this area is bound by roads and marked for timber prescription. 	<ul style="list-style-type: none"> • Consider using vacant allotments to allow wildlife to move through. 		<ul style="list-style-type: none"> • C • d • Ir • U • Ir • P: • w • a • M • tc
Recreation Conflicts	<ul style="list-style-type: none"> • Address snowmobiles in Valle Seco’s critical winter range. • Address ATVs disrupting the movement of big game in the Turkey Creek corridor. 	<ul style="list-style-type: none"> • Continue to enforce seasonal closures to protect the Chimney Rock critical habitat area for the peregrine falcon. 		<ul style="list-style-type: none"> • A • cc • P: • Ir • pl • Ir • pl • ac • w

Reintroduction	<ul style="list-style-type: none"> • Emphasize upper Blanco (Squaretop) and Saddleback for lynx. • Reintroduce the sharptail grouse. It is a native, non-predator species that adds to the diversity. Money is obtained through sportsmen's dollars, not the tax base. • Reintroduce the river otter—they are no longer trapped and could be successfully reintroduced. • Do not reintroduce wolves and grizzly bears. • Do not waste taxpayer money by reintroducing predator species. • Do not reintroduce wolves—they would impact the elk and deer population-both use same habitat. • Do not reintroduce the grizzly bear. It is arguable that there is sufficient habitat (fish, berries) to sustain them here. 	<ul style="list-style-type: none"> • Restrict rafters (river-use closure) to protect the river otter during sensitive seasons. 	<ul style="list-style-type: none"> • Reintroduce the sharptail grouse and manage grazing to allow for undisturbed mating periods. 	<ul style="list-style-type: none"> • B • C • C • P re
----------------	--	---	--	--

Wildlife Building Blocks (Pagosa)

- Protect habitat for critical species, such as goshawk, leopard frogs, peregrine falcon, mountain lions, turkey, and horned lizards.
- Protect critical corridors, winter ranges, and special habitats for sensitive species.
- Create reserve areas for “grass banks.”
- Balance other wildlife habitat needs with those of big game.
- Provide education and incentives to address conflicts between recreationists and wildlife.
- Improve interagency, community, and tribal coordination.
- Continue wildlife seasonal closures.
- Place a priority on productive riparian-area management for wildlife.
- Establish an adaptive, flexible system for implementing wildlife closures.

Wildlife Building Block Summary

	Pagosa	Blue	Red
1.	Protect habitat for critical species including goshawk, leopard frogs, peregrine falcon, mountain lions, turkey, and horned lizards. <ul style="list-style-type: none"> • Not favorable, because turkeys and mountain lions are not critical species. • Not favorable, because “protecting habitat” may restrict other uses. 	6	3
2.	Protect critical corridors, winter ranges, and special habitats for sensitive species. <ul style="list-style-type: none"> • Need separate building block to address different issues listed. • Dislike the word “protect” because it may be used to restrict uses, which is not favorable. 	9	2
3.	Create reserve areas for “grass banks.” <ul style="list-style-type: none"> • More of a range issue. • What is meant by grass bank? Use better wording. 	4	1
4.	Balance big game with other wildlife habitat needs.	9	1
5.	Provide education and incentives to address conflicts between recreationists and wildlife. <ul style="list-style-type: none"> • Add private landowners to recreation and wildlife. 	8	1
6.	Improve interagency, community and tribal coordination.	7	3
7.	Continue wildlife seasonal closures.	10	0
8.	Place a priority on productive riparian area management for wildlife. <ul style="list-style-type: none"> • Building block sounds too exclusive— implies eliminating multiple use or exclude other uses. • It is an indicator of ecosystem health. • Single species emphasis is problematic. • Impacts on riparian areas can harm wildlife. If you harm wildlife needs, you start to spread harm throughout the ecosystem. • It is an issue of giving cattle access to water wherever they want as opposed to constricting access in order to protect other closed-off areas. • Elk, deer, and people can be hard on the land as cattle. 	4	3
9.	Establish an adaptive, flexible system for implementing wildlife closures.	4	6

Wildlife

Columbine

Important Values

- elevation transitional zones
- species diversity
- eagle habitat
- river otter habitat
- peregrine nest sites
- bighorn winter range
- ponderosa and oak habitat for deer, elk, turkey, etc.
- mountain goat habitat
- winter wildlife habitat
- wildlife corridors
- lynx habitat
- raptor habitat
- mature old growth
- snag trees
- agency collaboration
- bird habitat
- voluntary stewardship
- large scale, continuous, contiguous, unroaded landscape
- balanced ecosystem

Wildlife Concerns and Approaches Matrix (Columbin

	Recommendations		
	Wildlife Designations and Prescriptions	Closures and Restrictions	Vegetation Management
Habitat Protection Riparian, TES, Prescriptions, and Winter Range	<ul style="list-style-type: none"> • Emphasize for habitat and species diversity(4B), not a single indicator specie. • Protect alpine, lowland, riparian (4B). • Protect waterways and habitat for eagles during their use/seasons. • Provide river otter protection. • Protect habitat for peregrine nest sites, critical bighorn winter ground (Basin, Lake Creek) • Expand 4B prescription southward and to lower elevations of HDs that have ponderosa pine and oak habitat for deer, elk, turkey, etc. • Do not allow development of private land in the East Fork Valley–add it to wilderness. • Expand wildlife prescriptions to overcome fragmentation in La Plata Canyon, Madden Peak, and Cherry Creek. • Retain 4B designations for transitional zones important for winter wildlife habitat (deer/elk). 	<ul style="list-style-type: none"> • During sensitive seasons protect raptors by restricting use. • Take a voluntary stewardship approach to restrict uses in order to protect wildlife. • Emphasize education to encourage cooperation; explain reasons for closures. • Protect and prioritize lower elevations (pine and oak) for wildlife winter range–enforce closures to keep out disturbances. 	<ul style="list-style-type: none"> • Retain/prioritize mature old growth in the lower-elevation ponderosa-pine type for wildlife. • Consider chaining, burning, seeding to improve vegetation. • Protect pine habitat vegetation in general for species dependent upon it. • Apply vegetation management practices (e.g., prescribed burning, thinning, and rollit to enhance winter range. • Spike and post snag trees as such to retain them (use volunteer groups).
Wildlife Dispersal and Migration Routes	<ul style="list-style-type: none"> • In spring, protect bird habitats from motorized disturbances. • Maintain, protect 4B corridors (Bayfield-Spring Creek; Moffat Creek; First Fork of Piedra; Lime and Silver Mesas; Granite Peak southwest to Southern Ute; and Weminuche southeastward) 	<ul style="list-style-type: none"> • Implement different levels of closures depending on needs. • Close certain roads to reduce impacts. • Consider seasonal closures on Sheep Cr. • Research impacts of area/road closures by comparing FS closures with adjacent land areas with open roads, e.g., S. Utes. 	<ul style="list-style-type: none"> • Fertilize to improve forage and hold elk on public land e.g., the Animas Valley. • Use fertilizer where you cannot burn.
Recreation Conflicts	<ul style="list-style-type: none"> • Allow limited winter recreation in 4B and 5B areas–limit the location, space, timing, etc. • Eliminate conflicting uses: La Plata Canyon, Madden Peak and Cherry Creek; Granite Peak bighorn habitat clashes with X-country skiing • Protect raptors from motorized and hiker traffic on top of mesas. 	<ul style="list-style-type: none"> • Close Twin Lakes above Chicago Basin from camping to protect mountain goats. • Do not allow a special recreation permit in First Notch area. • Limit fall ATV access in the HD area. • Concerned about heavy elk hunting pressures in lower Florida. 	
Reintroduction	<ul style="list-style-type: none"> • Provide large-scale, contiguous, unroaded lands, including a corridor, for wolf and grizzly (San Juan-Rio Grande, GMUG wilderness complex). • Protect habitat for Lynx (East Creek). • Reintroduce bighorn sheep in the Twilight Peak area. However, it is a sensitive winter range. Recreation would disturb animals. 		

Wildlife Building Blocks (Columbine)

- Establish vegetative and other habitat to achieve species diversity.
- Protect alpine lowland riparian areas.
- Protect waterways and related habitat for eagles and river otters.
- Protect sensitive raptor habitat; e.g., peregrine falcons.
- Expand wildlife prescriptions to overcome fragmentation.
- Protect wildlife corridors.
- Mitigate wildlife and recreation conflicts.
- Protect spring bird habitats from motorized disturbances.
- Develop voluntary stewardship as a means of addressing wildlife closures.
- Protect low-elevation wildlife winter habitat and range.
- Conduct monitoring on the results of road closures designed to protect wildlife.
- Close sensitive wildlife areas to recreation.
- Limit ATV use seasonally.
- Maintain mature, old growth in lower-elevation ponderosa pine for wildlife.
- Protect snag trees.
- Emphasize lower-elevation wildlife management due to previous high level of ecosystem alteration.
- Provide large, continuous, contiguous, unroaded landscapes for predator reintroduction.
- Reintroduce species to restore balance to the ecosystems.
- Plan ahead to protect areas needed for species reintroduction.
- Monitor dog impacts on wildlife and develop appropriate policy responses.
- Add East Fork Valley to wilderness.
- Increase collaboration among land-management agencies.

Wildlife Building Block Summary

Columbine		Blue	Red
1.	Establish vegetative and other habitat to achieve species diversity.	4	0
2.	Protect alpine lowland riparian areas. <ul style="list-style-type: none"> • “Alpine lowland” is confusing. 	1	0
3.	Protect waterways and related habitat for eagles and river otters.	1	2
4.	Protect sensitive raptor habitat; e.g., peregrine falcons.	1	0
5.	Expand wildlife prescriptions to overcome fragmentation.	5	0
6.	Protect wildlife corridors.	4	0
7.	Mitigate wildlife and recreation conflicts.	7	0
8.	Protect spring bird habitats from motorized disturbances.	0	1
9.	Develop voluntary stewardship as a means of addressing wildlife closures.	4	2
10.	Protect low-elevation wildlife winter habitat and range.	5	0
11.	Conduct monitoring on the results of road closures designed to protect wildlife.	4	
12.	Close sensitive wildlife areas to recreation.	4	0
13.	Limit ATV use seasonally.	1	0
14.	Maintain mature, old growth in lower-elevation ponderosa pine for wildlife.	5	1
15.	Protect snag trees.	1	1
16.	Emphasize lower-elevation wildlife management due to previous high level of ecosystem alteration.	3	1
17.	Provide large, continuous, contiguous, unroaded landscapes for predator reintroduction. <ul style="list-style-type: none"> • The SJNF does not have a big enough island. Animals will get in trouble and be killed. • We are not only talking about predators, but about species like the sharptail grouse. • There is more acceptance for species that would have fewer negative encounters with humans. • Favorable, because this is necessary in order to reintroduce wolves and bears. • Not favorable, because big areas are not needed for reintroduction, e.g., small areas in Canada. 	5	6
18.	Reintroduce species to restore balance to the ecosystems. <ul style="list-style-type: none"> • Keep bears out. Concerned with predators. There is a danger to the animals themselves from people who will kill them if they are reintroduced. • Accept what we have now and focus our care on what is left. • Funds should go to more important, urgent causes. 	1	8
19.	Plan ahead to protect areas needed for species reintroduction.	0	5
20.	Monitor dog impacts on wildlife and develop appropriate policy responses.	4	2
21.	Add East Fork Valley to wilderness.	7	2
22.	Increase collaboration among land management agencies.	7	0

Wildlife

Dolores

Important Values

- turkey and sharptail grouse habitat and big-game winter range
- wolverine and lynx reintroduction in wilderness
- viable biodiversity niches
- minimal human-caused disturbances to wildlife
- proper grazing practices
- snags in aspen and pine
- riparian areas
- whole forest, beyond big game
- habitat partnerships
- wolf reintroduction/balance among other wildlife
- protected areas for individual TES species
- wildlife's intrinsic value

Wildlife Concerns and Approaches (Dolores)

	Recommendations			
	Wildlife Designations and Prescriptions	Closures, Restrictions and Access	Vegetation Management	Migration
Habitat [riparian, TES, and winter range]	<ul style="list-style-type: none"> • Emphasize turkey, sharptail grouse, and big-game winter range in Lower Dolores area. • Designate critical winter turkey habitat. • Manage for severe winter elk and deer habitat (lower Disappointment) • Protect lower Lost Canyon and Ryman Creek for deer habitat. • Prioritize wildlife habitat over grazing in areas that are sensitive elk habitat. • Reduce some winter wildlife areas in size. 		<ul style="list-style-type: none"> • Improve habitats through proper grazing practices, monitoring, and rest rotation timing. • Manage to provide snags in aspen and especially pine. • Leave certain percent of old trees for future snags, nesting, and diversity. • Protect riparian areas—they serve a wide range of wildlife. • Identify and restore key riparian areas, e.g., House Creek Exclosure. • Restore riparian areas by fencing and allowing seed regeneration. • Carefully monitor exclosures; consider other mgmt. practices to restore/protect riparian areas. 	<ul style="list-style-type: none"> • Identify key riparian areas to protect • Use for riparian habitat • Exclude grazing from riparian areas • Allow riparian areas to regenerate • Manage riparian areas to improve wildlife habitat • Manage riparian areas to improve wildlife habitat • Locate riparian areas to improve wildlife habitat
Wildlife Dispersal and Migration Routes		<ul style="list-style-type: none"> • Close roads to minimize human-caused disturbances and keep elk on public land, especially during calving season. (W. Dolores between Dunton and Ground Hog Reservoir) 	<ul style="list-style-type: none"> • Take vegetation management actions to attract elk onto public land, away from private (McPhee Dam to Bradfield Bridge, Dunton and Ground Hog Reservoir). • Chain and mulch dense pinon-juniper to improve forage to disperse game. 	<ul style="list-style-type: none"> • Restore riparian areas to improve wildlife habitat • Exclude grazing from riparian areas • Allow riparian areas to regenerate • Manage riparian areas to improve wildlife habitat • Manage riparian areas to improve wildlife habitat • Locate riparian areas to improve wildlife habitat
Reintroduction	<ul style="list-style-type: none"> • Reintroduction of sharptail grouse is acceptable if we can see them and hunt them • Reintroduce the sharptail grouse. • Reintroduce wolverine and lynx in wilderness. • Manage, protect, mitigate, and provide viable biodiversity niches on forest lands for T&E species. 		<ul style="list-style-type: none"> • Improve habitat for STG in the Glade area. • Use rest rotation grazing management to allow grasses and shrubs to grow for STG habitat. • Think twice about changing habitat to reintroduce the grouse. • Determine what we want to accomplish to determine best vegetation management. 	<ul style="list-style-type: none"> • Reintroduce riparian areas to improve wildlife habitat • Reintroduce riparian areas to improve wildlife habitat • Set riparian areas to improve wildlife habitat • Use riparian areas to improve wildlife habitat • Reintroduce riparian areas to improve wildlife habitat

Wildlife Building Blocks (Dolores)

- Designate critical winter turkey habitat.
- Manage for some winter elk and deer habitat.
- Prioritize sensitive elk habitat over grazing.
- Reintroduce sharptail grouse.
- Increase snags to improve nesting and species diversity.
- Restore riparian areas through fencing, restoration, seeding, and a more holistic, comprehensive resource-management approach.
- Utilize active ecosystem management to improve wildlife habitat while allowing forest use.
- Provide for viable biodiversity by identifying, managing, and preserving viable niches in the forest.
- Increase interagency compliance, matching Forest Service and BLM prescriptions in adjacent areas.
- Provide large blocks of spruce-fir for lynx and wolverine reintroduction.

Wildlife Building Block Summary

	Dolores	Blue	Red
1.	Designate critical winter turkey habitat.	2	2
2.	Manage for some winter elk and deer habitat.	8	1
3.	Prioritize sensitive elk habitat over grazing in critical areas.	1	3
4.	Reintroduce sharptail grouse. <ul style="list-style-type: none"> • Even though the DOW may want to do this, it is not favorable because providing sharptail grouse habitat would require a lot of work and money to change the current conditions. • Favorable, because providing sharptail grouse habitat would also help other species. Also, the current conditions are not natural, they have been created by human management of cattle. 	0	3
5.	Increase snags to improve nesting and species diversity. <ul style="list-style-type: none"> • Do not agree with killing a green tree to make snags. Old trees will die to make snags. 	3	1
6.	Restore riparian areas through fencing, restoration, seeding, and a more holistic, comprehensive resource-management approach. <ul style="list-style-type: none"> • Sounds like more of a range concern. • Not favorable, because fencing is not necessarily good for wildlife. 	6	0
7.	Utilize active ecosystem management to improve wildlife habitat while allowing forest use. <ul style="list-style-type: none"> • One of the best written building blocks out of all the issues. • Ecosystem management is not clearly defined, but it is acceptable as long as human use is allowed at the same time. 	11	0
8.	Provide for viable biodiversity by identifying, managing, and preserving viable niches in the forest.	6	1
9.	Increase interagency compliance, matching Forest Service and BLM prescriptions in adjacent areas. <ul style="list-style-type: none"> • Other agencies get away without taking responsibility that the Forest Service has to take up. They should help to manage land better. 	7	1
10.	Provide large blocks of spruce-fir for lynx and wolverine reintroduction.	1	11

Aquatic Resources

Issue Definition

Forest lands are important watershed areas that contribute to both the quantity and quality of downstream water resources. This issue focuses on the protection of watershed values in the context of activities that disturb the ground, such as grazing, road construction, wildlife, logging, mining, oil and gas extraction, wildfire, and recreation, and the pressures of water consumption and agricultural-water use in a fast-growth economy.

Presentation Summary

Watershed program

The Watershed program focuses on :

- 1) stream protection;
- 2) restoration and site-specific projects integrated with other management areas;
- 3) data collection and monitoring.

Logging

- The SJNF enforces a 75-foot buffer on each side of year-round and seasonal streams located in timber sales. There is no buffer standard in the current Plan, but the SJNF is studying how much protection streams need. The Code of Federal Regulations recommends 100 feet.
- Forest roads cause 90 percent of watershed problems, particularly silt runoff. Proper drainage is essential.
- Techniques to stop silting and erosion: fill in skid trails and roads after harvests; place logs strategically in erosion-prone areas; seed and reseed, pile up slash, rip, build weirs and water bars to slow runoff, change routes to avoid rutting.

Grazing

- Stream-bank monitoring is important to control the negative effects of trampling. Slow-moving streams with grassy banks are most sensitive. A site with more than 25 percent trampling is a problem. No standard upper limit is set for streambank or wetland trampling, but the SJNF is working to arrive at one.
- A 4-inch stubble height is set as utilization limit for grazing a riparian area.
- Pedestals, small mounds caused by hoof-prints in mud through which water flows, contribute to erosion and siltation.

Mining

- “Hotspots” of mineral runoff from historical mines are targets from rehabilitation. The Animas River Stakeholders, a team of state, local, and federal representatives, is conducting a “limiting factor analysis” with a goal of a “self-sustaining fishery below Silverton.”

Data collection

- National air quality monitoring sites at Molas and Wolf Creek measure air quality and long-term changes. Precipitation and acid deposition in high elevation lakes are measured regularly.
- Stream health is monitored by measuring changes in stream width, depth, general shape of the bottom, and number and types of insects and vegetation.

Fishery program

There are three main components in the fishery program:

- 1) Protection;
- 2) Restoration; and
- 3) Enhancement(providing fishing and education opportunities).

In addition to trout fisheries, we are equally concerned with other water-dependent species. Aquatic biodiversity and species viability are important planning issues. A combination of both human use and natural events must be accounted for in range of natural variability.

Plan Revision Issues

1. Threatened and endangered and sensitive species (Colorado River Cutthroat trout). A planned biological assessment will help develop standards and guidelines and general management direction.
2. Water use: diversions for irrigation, drinking water, etc.
3. The stocking of hatchery-reared fish in wilderness and whether the Colorado Division of Wildlife should stock wilderness lakes while whirling disease is a threat. It is extremely difficult to ensure disease-free stocking. Whirling disease may cause fishing restrictions in the future. The state does not have disease-free fish to stock streams. The disease will probably have to run its course in the wild. Native fish have no resistance to it. CDOW probably will not stock in wilderness and will lean towards resource protection rather than recreation. The Forest Service and the CDOW will work cooperatively towards managing whirling disease.
4. Aquatic biodiversity. A forestwide assessment will base recommendations in part on a stream classification system.

Discussion Questions

- How can we improve management direction and guidelines?
- Should we have different management goals for different watershed uses?
- How can we better time activities?
- Mark areas on the map of high value to you.
- Mark areas on the map that are impaired and need attention.

Aquatic Resources

Pagosa

Important Values

- water quality
- viable habitat
- consistency between USFS, CDOW, and the Forest Plan
- fishing
- Colorado River cutthroat trout recovery
- high-value creeks and lakes
- water recreation
- watershed management
- water diversions

Aquatic Resource Concerns and Issues Matrix (Pagosa)

	Recommendations	
	Resource Allocation	Habitat Rehabilitation and Recovery Measures
Impaired Areas	<ul style="list-style-type: none"> • Navajo, Blanco diversions. • East Fork: erosion and unstable banks. Also: sedimentation—what is natural and what is human-caused from poor practices? • Four Mile: question over its ability to maintain a viable habitat. • Quartz Creek recreation trails have eroded the bank. • Sand Creek: recreation impacts, water quality 	<ul style="list-style-type: none"> • Williams Lake: remove some willow overgrowth • Blanco and Blue Creeks: improve the fish habitat • San Juan River: address sediment caused by diversions • Sand Cr. (E. Fork of Piedra): address the sediment • Address, mitigate sediment and diversions caused by the Bureau of Reclamation where appropriate
High Value Areas	<ul style="list-style-type: none"> • Pagosa area drinking water. Supply area for town is larger than map shows. • Diversions. They provide water to irrigate for grass. • All water resources: multiple-use management. Manage it all wisely. • High lakes: Emerald, Flint, Ute, Four Mile, Quartz, Granite, Fish, Williams Fork, Crater • Turkey Creek. • Upper Piedra is a high-value fishery, but with high impacts. 	<ul style="list-style-type: none"> • Maintain the lower Piedra (below road) for recreation (hiking and scenery, otter watching, rafting) • Maintain the water recreation values of upper Piedra • Maintain upper Williams Creek along trail • E. Fork, Pyramids, Granite, and Emerald lakes • Maintain the aquatic/scenic value of the E. Fork
Stocking	<ul style="list-style-type: none"> • Encourage consistency between USFS, the San Juan Forest Plan and the CDOW regarding wilderness stocking. • Absolutely no wilderness stocking, because of whirling disease. 	
Colorado River Cutthroat Trout		<ul style="list-style-type: none"> • Consider Elk Creek for a cutthroat recovery site • Address overcrowding of cutthroat and otter in upper canyon of Middle Fork—Piedra. • Consider Indian Creek off Williams, Porphyry Fork) for potential cutthroat recovery sites • Remove existing brook trout in Fish Creek cutthroat—both have barriers for cutthroat recovery
General forestwide emphasis	<ul style="list-style-type: none"> • Do not approve the proposed Fairfield pump site on the San Juan because it cuts-off junior irrigation rights. Rather, remove water further up stream where other water is pulled—no pump needed. • Address the “acceptable water flow” discrepancies between the state and Bureau of Reclamation. Use a “steady flow” measurement, not an “average flow” in order to have and manage fish habitat. • Do not let the CDOW divert water specifically designated for diversion. • Do not allow the proposed San Juan-Chama Diversion. • Improve private- and public-land signage, education on the San Juan River, e.g., Is it okay to wade in the river if there is private property on both sides? 	<ul style="list-style-type: none"> • Watershed management is vital as watershed health is prioritized in every management decision • Concern for hot springs and recreational use • Concern that watershed emphasis may rest on recreation
Future Reservoir Development	<ul style="list-style-type: none"> • Allow development of small stock tanks, but don't develop more big ones. • Possibly develop a water reservoir on Turkey Creek. • Put another dam in Echo Creek (public land). 	

Aquatic Resource Building Blocks (Pagosa)

- Develop consistency between USFS and CDOW through the Forest Plan.
- Develop cutthroat recovery sites.
- Manage watershed as primary indicator of overall ecosystem health.
- Maintain recreation aquatic and scenic values.

Aquatic Resources Building Block Summary

Pagosa		Blue	Red
1.	Develop consistency between USFS and CDOW through the Forest Plan	8	1
2.	Develop cutthroat recovery sites. <ul style="list-style-type: none"> • Nice idea, but we cannot afford it. Plus, there appeared to be enough sites on the map. • Add “in high mountain streams”. 	5	4
3.	Manage watershed as primary indicator of overall ecosystem health. <ul style="list-style-type: none"> • Not favorable, because it is too nebulous. How do you do this? 	9	3
4.	Maintain recreation aquatic and scenic values. <ul style="list-style-type: none"> • Manage on a watershed basis. • There must be a better way to write the statement. 	5	1
<i>Added Building Block suggested by one group</i>			
5.	Insure enough water for forest management and wildlife uses. <ul style="list-style-type: none"> • Not favorable, because the state controls water rights, not the FS. • How can you do this? Perhaps consider permittee improvements. Need to realize that water ditches built for allotments also benefit wildlife. • Favorable, because we need to look ahead and plan for growth. Favor water being used for local economic needs, grazing, etc. • Dislike the perception that timber and range are “using the resource and making all the money”, because it trickles through the community, e.g., food for everyone. 	2	5

Aquatic Resources

Columbine

Important Values

- native species
- habitat for native species
- management direction for aquatic species
- prevention of resource damage
- scientific study areas
- rehabilitation
- roadless areas to protect streams
- disease-free fish populations

Aquatic Resources Concerns and Approaches Matrix (Colu

	Recommendations	
	Resource Allocation	Implementation
Impaired Areas	<ul style="list-style-type: none"> • Rock/iron outcropping at Rock Creek (intrusion). • Transmountain diversion. • Identify suitable areas other than Hermosa for reintroduction, although it is a primary area for natives and is extensive. Do not put all our eggs in one basket. Genetic exchange in macro-populations is an issue. • Consider potential for establishing an aquatic-emphasis geographic management area. • General prescription may not allow fair attention to particular species' needs. Establish specific management direction for aquatic resources in overall management area prescription. • Recreation and fishery conflict (sensitive species): Make clear decisions on where the emphasis must be if forced to choose one over the other in the pecking order during the life of the plan. • Limit wilderness users and eliminate train stop to protect Chicago Basin aquatic resources. • Focus on preventing resource damage, rather than fixing poor areas (e.g., Dutch Creek). 	<ul style="list-style-type: none"> • Dutch Cree ORVs wou there. • Consider th fisheries rel • Mitigate sec (e.g., Beave • Address the • Address aq • Stop grazin water probl
High Value Areas	<ul style="list-style-type: none"> • Big Bend. • Protect the Hermosa drainage for a scientific study area. • Emphasize acquiring mining claims in wilderness. 	
Stocking		<ul style="list-style-type: none"> • Hold a mor of whirling
Colorado River Cutthroat Trout		<ul style="list-style-type: none"> • Consider C • Consider B people go t • Do not buil silting of cu • Consider B grazing, tre • Prevent list minimize b options.

Aquatic Resources Building Blocks (Columbine)

- Identify and designate suitable areas for reintroduction and recovery for native species.
- Review the possibility of establishing specific management direction for aquatic resources.
- Establish special fishery rehabilitation areas.
- Prepare prescriptions which clarify priorities when conflicts between recreation and aquatic resources occur.
- Limit impacts of overuse in wilderness areas to protect aquatic resources.
- Focus on prevention of aquatic resource damage rather than repairing damage.
- Protect high value roadless, backcountry areas for aquatic resource study.
- Resist roading current high-value roadless areas.
- Emphasize cutthroat trout protection in order to avoid listing them as endangered, creating bureaucratic barriers to rehabilitation management.

Aquatic Resources Building Block Summary

	Columbine	Blue	Red
1.	Identify and designate suitable areas for reintroduction and recovery for native species. <ul style="list-style-type: none"> • Let nature take its course rather than reintroducing or managing. It will come back if we leave it alone. Protect what is there. • Reintroduction is not a high priority. • Do not want grouse at the expense of the permittees. • Predators will eat reintroduced species almost immediately. Must plan carefully. 	5	3
2.	Review possibility of establishing specific management direction for aquatic resources.	0	1
3.	Establish special fishery rehabilitation areas.	0	1
4.	Prepare prescriptions which clarify priorities when conflicts between recreation and aquatic resources occur.	6	0
5.	Limit impacts of overuse in wilderness areas to protect aquatic resources.	5	0
6.	Focus on prevention of aquatic resource damage rather than repairing damage.	7	0
7.	Protect high value roadless, backcountry areas for aquatic resource study.	2	1
8.	Resist building roads in current high-value roadless areas.	9	2
9.	Emphasize cutthroat trout protection in order to avoid listing them as endangered, creating bureaucratic barriers to rehabilitation management. <ul style="list-style-type: none"> • Dislike because the last phrase off-sets the intention of the rest of the statement. "...creating bureaucratic barriers to rehabilitation management," is a critique of the system and minimizes the importance of endangered species protection. 	5	2

Aquatic Resources

Dolores

Important Values

- a range of good fishing sites
- paddle sports
- scenery
- fish, Colorado River cutthroat trout habitat

Aquatic Resources Concerns and Approaches (Dolores)

	Recommendations	
	Resource Allocation	Rec
Impaired Areas	<ul style="list-style-type: none"> • Stoner Creek Diversion. • Cold Creek: elk. • Willow Creek: erosion on allotment. • Priest Gulch Campground. • Roaring Forks: sediment. It has cutthroat in it. • Upper Animas' mining past: natural metals in stream. • Disappointment Creek: muddy. • West Dolores: mineralization. • La Plata Canyon and Lower Dolores: degradation from old mines and roads. • Lake Parmentier: recreation. • Wildcat: erosion of stream bank. • East Mancos: high pH may be natural-caused. 	<ul style="list-style-type: none"> • Handle imp areas and ar
High Value Areas	<ul style="list-style-type: none"> • Log bars on Ryman Creek above Five-Mile Bridge is high value for cutthroat. • Scotch Creek is a good fishery. • Fish Creek. • Groundhog Creek. • Barlow has good fishing. • Snowslide has good fishing. • Upper Animas, upper San Juan, upper Pine for rafting. • Upper Stoner for cutthroat. • East Dolores has good fishing. • Upper and West Dolores River: multiple values for paddle sports, scenery, and fish. Some people want to see more water. • Do not publicize ATV proposals on Dolores River. They are bad for bighorn sheep calving along the river in spring (Slick Rock area). Horses are not as bad, but they can still have an impact. • Beaver Creek and Lost Canyon: lots of gravel, rocks for purifying water. • Hermosa Creek: good system with natural barriers. • Vallecito and Pine: drinking water to Bayfield and Ignacio. • Drinking water supply watersheds are a priority. • Beavers have a beneficial effect: visual, pond creation probably improve range need. They raise water levels. • Lizard Head Pass and Divide Highway: wetlands near Telluride are valuable for mushrooms. • Bear Creek in national forest. • Dolores River fishery is the second highest user of McPhee (about 55,000 full service, farm use; 29,000 fisheries. It dried up before the dam most years. • La Plata Canyon: recreation and drinking water supply. 	
General	<ul style="list-style-type: none"> • Build a reservoir in Disappointment Valley. • Build reservoir in Johnny Bull and Bear Creek on national forest. • Other stakeholders need to be at the table when designating use on stream. • Set standards and guidelines with how it plays out with other uses and impacts. • Keep lines of communication open. 	<ul style="list-style-type: none"> • Rico needs • Encourage Hermosa C to maintain

Aquatic Resources Building Blocks (Dolores)

- Manage allotments to prevent erosion.
- Manage specific areas for quality cutthroat habitat.
- Manage specific streams for water recreation opportunities.
- Coordinate with water users for siting reservoir developments.

Aquatic Resources Building Block Summary

	Dolores	Blue	Red
1.	Manage allotments to prevent erosion.	6	0
2.	Manage specific areas for quality cutthroat habitat.	4	3
	<ul style="list-style-type: none"> • Not favorable, because it is too specific, do not like single specie management. 		
3.	Manage specific streams for water recreation opportunities.	6	1
	<ul style="list-style-type: none"> • Not favorable, because it is too narrow. There may be a need to separate some water recreation, e.g., separating fly fishing from water skiing. 		
4.	Coordinate with water users for sighting reservoir developments.	4	5
	<ul style="list-style-type: none"> • Not favorable, because to bring so many people into the process causes red tape and bureaucracy. • Reservoir (stock pond or other types of) development is low-priority, because no one will want to do it. Too many bureaucratic hoops to jump through. 		