

## INTRODUCTION

The planning area shares the management on portions of three Wilderness Areas (Weminuche, South San Juan, and Lizard Head) with two other forests (the Grand Mesa, Uncompahgre and Gunnison/GMUG and the Rio Grande National Forests). The SJPLC has management responsibility for four BLM Wilderness Study Areas (WSAs): the Dolores River Canyon, McKenna Peak, Menefee Mountain, and Weber Mountain, as well as for one congressionally designated area – the Piedra. All in all, the SJPLC manages approximately 420,522 acres of congressionally designated Wilderness Areas, approximately 55,428 acres of WSAs, and the Piedra Area (approximately 62,550 acres) (which is managed for its Wilderness character).

Under the Colorado Wilderness Act of 1993, the Piedra Area (which was, at the time, an Inventoried Roadless Area/IRA), was so designated by Congress in order to maintain the area's existing wilderness charter. It now has potential to be included in the National Wilderness Preservation System. However, under Section 9 (b) Management, (2)(a), the SJPLC is not obligated to study the area for official Wilderness designation. Based on this Congressional mandate, the DLMP/DEIS does not include the Piedra Area in its roadless analysis. However, areas adjacent to the Piedra were analyzed.

Wilderness is part of the multiple-use management mission of both the BLM and the USFS. Wilderness provides opportunities for solitude, as well as for primitive and unconfined recreational experiences. Wilderness is also important to the maintenance of species diversity, the protection of threatened and endangered species, and the protection of watersheds, scientific research, and various social values. (For additional information about Wilderness, WSAs, and/or other special areas, refer to Wilderness Management Direction, amending the LMP for the San Juan and Rio Grande National Forests, which was completed in August of 1998. The San Juan/San Miguel Wilderness EIS (BLM 1990), is incorporated herein by reference.)

The Wilderness Act of 1964 directs the USFS to analyze additional undeveloped and unroaded lands for proposed inclusion in the National Wilderness Preservation System. The USFS inventories potential Wilderness by identifying IRAs of approximately 5,000 acres or larger, and/or IRAs adjacent to existing Wilderness Areas. There are three tests applied to IRAs before they are considered for Wilderness Area recommendations: capability, availability, and need. (See Appendix C, Volume III, for an inventory of IRAs.)

On October 21, 1993, the BLM completed its formal Wilderness review of the planning area. As a result of the analysis, the areas currently managed as WSAs would remain WSAs, until Wilderness legislation is passed or until Congress releases the areas for multiple uses (IM-2003-275).

## LEGAL AND ADMINISTRATIVE FRAMEWORK

### LAWS

- ***The Wilderness Act of 1964***: This act established a National Wilderness Preservation System for the permanent good of the whole people, and for other purposes. The Act provides guidance for the designation and management of Wilderness Areas.
- ***Federal Land Policy and Management Act (FLPMA) of 1976***: Section 603 of FLPMA, instructed the agency to inventory all of their lands, identify which were definitely not of wilderness quality, and then begin an intensive inventory and analysis to determine which of the remaining lands would be recommended for inclusion into the National Wilderness Preservation System.
- ***The Colorado Wilderness Act of 1993***: This act adds acreages to the following wilderness area(s): Buffalo Peaks Wilderness, Byers Peak Wilderness, Fossil Ridge Wilderness, Greenhorn Mountain Wilderness, Hunter-Fryingpan Wilderness, La Garita Wilderness, Lost Creek Wilderness, Mount Zirkel Wilderness, Never Summer Wilderness, Ptarmigan Peak Wilderness, Raggeds Wilderness, Sangre de Cristo Wilderness, Sarvis Creek Wilderness, South San Juan Wilderness, Uncompahgre Wilderness, Vasquez Peak Wilderness, Weminuche Wilderness.

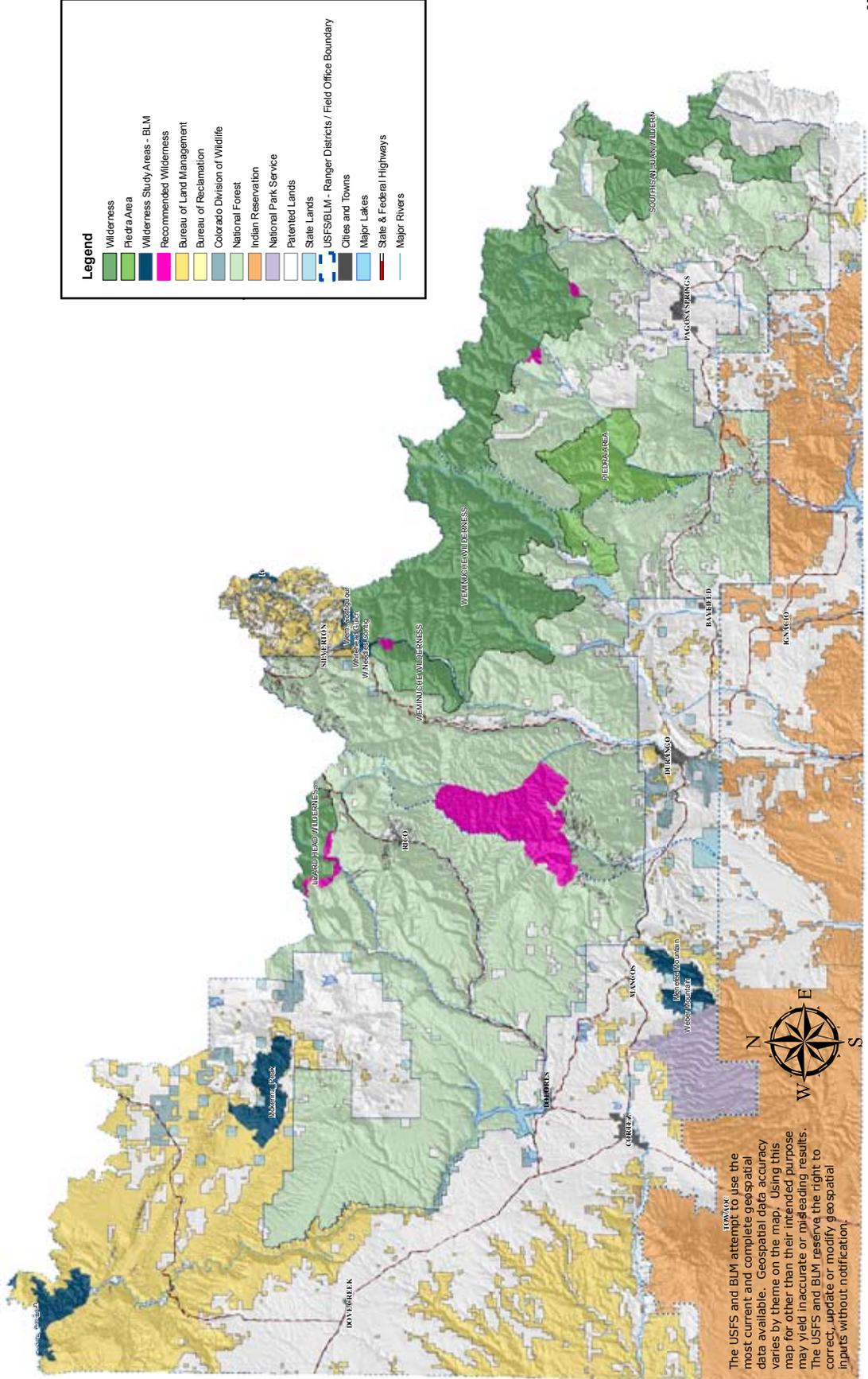
### REGULATIONS AND POLICIES

- ***BLM Policy H-8550-1***: This provides direction for the roles of the States and BLM in the management of resident fish and wildlife in the WSAs; policy for construction of new permanent installations and for surface-disturbing activities in the WSAs; policies related to stocking, augmentation and re-establishment of wildlife species in the WSAs; policies for introduction or transplant of wildlife species into the WSAs; wildlife damage management in the WSAs; and modifications to Chapter 1, Section B, on implementing specific policy guidance related to management of the WSAs.
- ***FSM 2300***: This provides direction for management and planning in relation to recreation, Wilderness, and related resources.

Figure 3.34.1 – Recommended Wilderness Alternative B

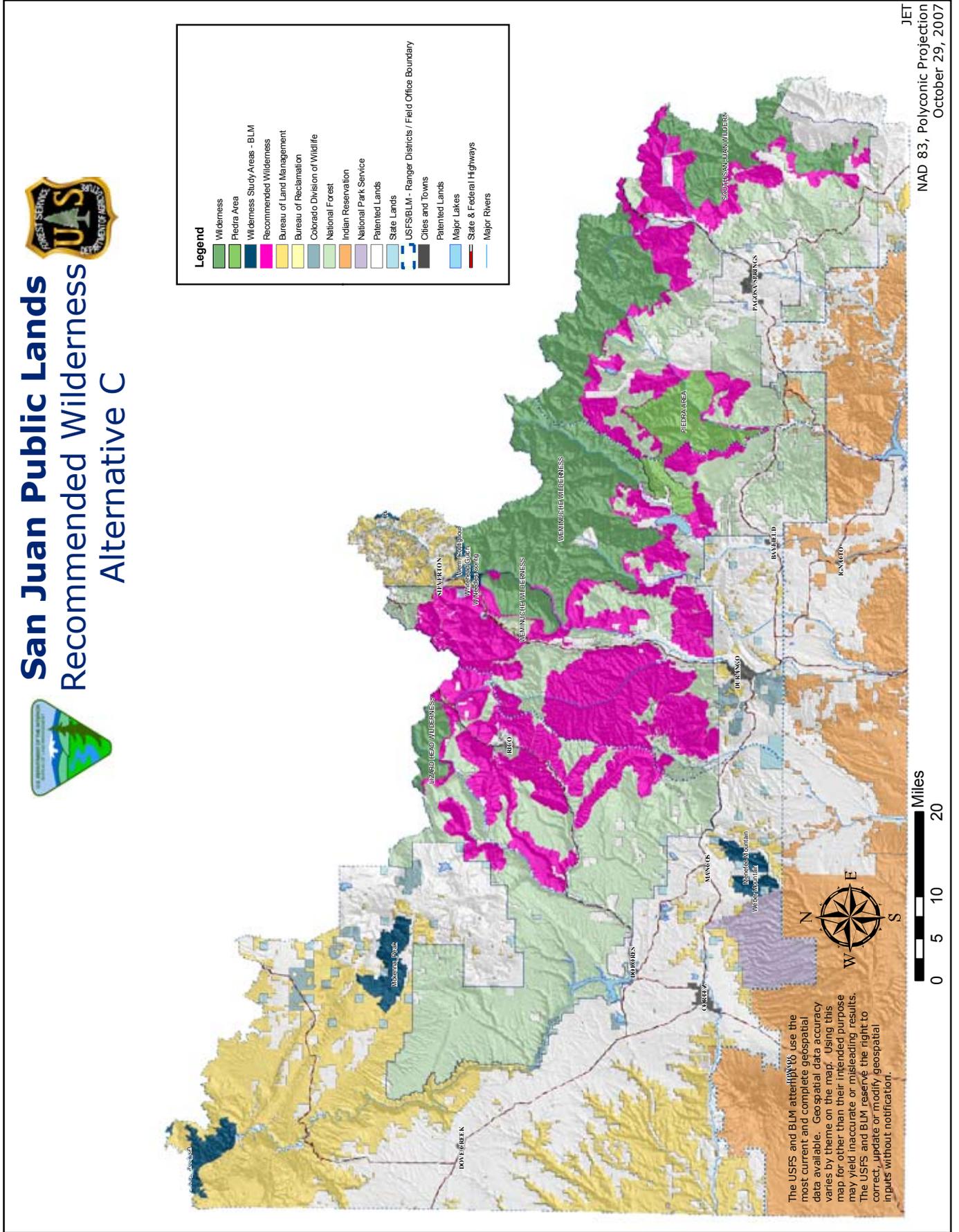


# San Juan Public Lands Recommended Wilderness Alternative B



JET  
NAD 83, Polyconic Projection  
October 29, 2007

Figure 3.34.2 – Recommended Wilderness Alternative C



## DESIGN CRITERIA

Management guidelines and design criteria describe the environmental protection measures that would be applied to all of the alternatives at the project level in order to protect, enhance, and, where appropriate, improve resources related to wilderness and roadless area. Guidelines and design criteria are presented in Part 3 of Volume 2 of the DLMP/DEIS.

## AFFECTED ENVIRONMENT

### Existing Conditions and Trends

#### Roadless Inventory

Using criteria from USFS directives, the San Juan National Forest (SJNF) conducted an inventory for this planning process. As a result, they identified 19 areas (totaling approximately 558,282 acres) as having “roadless character.” (See Appendix C for illustrations of the 19 IRAs, and for details on the proposed management for each IRAs.)

IRAs included for analysis in this DLMP/DEIS meet the following criteria from the Wilderness Act and from Forest Service Handbook 1909.12:

- areas contain 5,000 acres, or more;
- areas contain less than 5,000 acres, but are contiguous to existing Wilderness Areas, or to areas recommended for Wilderness under other Federal ownerships; and
- areas do not contain classified roads.

Classified road are roads that are wholly, or partially, within or adjacent to USFS lands determined to be needed for long-term motor vehicle access. This includes private, local, State, and other Federal roads ( USFS [36 CFR 212.1].)

IRAs may contain motorized and non-motorized trails and user-created roads. They may also contain improvements (including motorized trails, unauthorized user-created roads, fences, Outfitter/Guide camps, and evidence of historical logging activities).

Recent timber harvesting areas, utility corridors, ski areas, and large reservoirs were excluded from the inventory. Table 3.34.1 shows the 19 areas included in the IRA inventory. The 558,282 inventoried roadless acres are approximately 4% of the total SJNF area.

**Table 3.34.1 - Roadless Areas Inventoried**

	<b>AREA NUMBER</b>	<b>INVENTORIED ROADLESS AREA</b>	<b>ACRES</b>	<b>LANDSCAPE</b>
1	SJ240	San Miguel	64,162	Columbine and Dolores
2	SJ284	South San Juan Adjacent	35,077	Pagosa
3	SJ285	Treasure Mountain	22,512	Pagosa
4	SJ286	Turkey Creek	25,326	Pagosa
5	SJ291	Graham Park	17,808	Columbine
6	SJ292	Piedra Area Adjacent	44,789	Columbine and Pagosa
7	SJ293	Runlett Park	5,618	Columbine
8	SJ294	Florida River	5,726	Columbine
9	SJ295	HD Mountains	25,140	Columbine
10	SJ302	East Animas	16,864	Columbine
11	SJ303	West Needles	7,049	Columbine
12	SJ304	Blackhawk Mountain	17,533	Dolores
13	SJ305	Storm Peak	57,623	Dolores
14	SJ306	Hermosa	148,139	Columbine and Dolores
15	SJ315	Ryman	8,665	Dolores
16	SJ310	Fish Creek	13,537	Dolores
17	SJ320	Weminuche Adjacent	22,683	Columbine and Pagosa
18	SJ235	Lizard Head Adjacent	5,558	Dolores
19	SJ309	Baldy	20,032	Dolores
		<b>TOTAL</b>	558,282	

Source: GIS Inventory

### **Wilderness Potential Evaluation**

Lands evaluated under the roadless inventory, were further evaluated for their potential as Wilderness Areas. This evaluation is based on Wilderness capability, availability, and need.

Capability - The capability of a potential Wilderness Area is the degree to which that area contains the basic characteristics that make it suitable for Wilderness. The characteristics considered in this analysis are shown in Table 3.34.2.

**Table 3.34.2 – Wilderness Characteristics**

	<b>WILDERNESS CHARACTERISTICS</b>
Environment	The degree to which an area appears to be free from disturbance, so that the normal biological processes continue; and the degree to which the area provides visitor opportunity for solitude and sense of remoteness.
Challenge	The degree to which the area offers visitors an opportunity to experience adventure and self-reliance, often measured by the physical character of the land (terrain and vegetation) and proximity to sights and sounds of developments and travel systems.
Manageability of Boundaries	Consideration of the ability to manage the area as Wilderness; factors considered are size, shape, and juxtaposition to external influences.
Special Features	The capability of an area to provide other features such as geologic, scenic, or cultural values.

**Availability** - The availability of a potential Wilderness Area is conditioned by the value of the Wilderness resource, when compared to the value of, and need for, other resources. Examples of values that may conflict with Wilderness values include oil and gas potential and exploration, timber harvesting, motorized/mechanized travel (summer or winter), fuels reduction needs, wildlife habitat treatments, and/or water storage needs. All lands identified as capable are further evaluated for availability. Table 3.34.3 lists lands that have been identified as capable and available for Wilderness within the planning area

**Table 3.34.3 – Roadless Areas Capable of and Available for Wilderness Recommendation**

	Map #	ROADLESS AREA NAME	ACRES	ADJACENT WILDERNESS	AVAILABILITY
1	SJ310	Fish Creek	13,537	Lizard Head	Available
2	SJ305 (RARE 2305)	Storm Peak	57,623	Lizard Head	Available
3	SJ315 (RARE 2315)	Ryman	8,665	Lizard Head	Available
4	SJ235 (RARE II 2235)	Lizard Head Adjacent	5,482	Lizard Head	Available
5	SJ304 (RARE II 2304)	Blackhawk Mountain	17,533	Lizard Head	Available
6	SJ306 (RARE II 2306)	Hermosa	148,739	Lizard Head, Weminuche	Available
7	SJ240 (RARE II 2240)	San Miguel	64,162	Lizard Head, Weminuche	Available
8	SJ303 (RARE II 2303)	West Needle	7,049	Weminuche	Available
9	SJ302 (RARE II 2302)	East Animas	16,864	Weminuche	Available
10	SJ309 (RARE II 2309)	Baldy	20,032	Weminuche	Available
11	SJ294 (RARE II 2294)	Florida River	5,726	Weminuche	Available
12	SJ293 (RARE II 2293)	Runlett Park	5,618	Weminuche	Available
14	SJ292 (RARE II 2292)	Piedra Area Adjacent	44,789	Piedra	Available
15	SJ291 (RARE II 2291)	Graham Park	17,808	Weminuche	Available
16	SJ320 (RARE II; 2294, 2290, 2288, 2293, 2289, 2287)	Weminuche Adjacent	22,683	Weminuche	Available
17	SJ286 (RARE II 2286)	Turkey Creek	25,314	Weminuche	Available
18	SJ285 (RARE II 2285)	Treasure Mountain	22,512	South San Juan	Available
19	SJ284 (RARE II 2284)	South San Juan Adjacent	34,793	South San Juan	Available

Source: GIS Inventory

\* Note: La Plata was combined with Hermosa in Appendix C

**Need** - In terms of Wilderness potential, need addresses the degree to which an area would contribute to the overall National Wilderness Preservation System. Need is evaluated on a regional basis, and takes into consideration such factors as geographic distribution and representations of landforms and ecosystems. Table 3.34.4 summarizes the need evaluation for potential areas within the planning area.

**Table 3.34.4 – Need Evaluation**

	MAP #	ROADLESS AREA NAME	ACRES NEEDED	NEED
1	SJ310	Fish Creek	0	The area would not add significantly to the National Wilderness Preservation System. Proposed management under all alternatives would protect Wilderness characteristics while, at the same time, allowing for additional management tools not allowed under Wilderness protection. Recreation use (including mechanized travel) would be allowed while, at the same time, maintaining the SPNM character of the area.
2	SJ305	Storm Peak	0	Same as Number 1.
3	SJ315	Ryman	0	Same as Number 1.
4	SJ235	Lizard Head Adjacent	2,632	The area would enhance Wilderness management of the existing Lizard Head Wilderness Area by improving the boundary.
5	SJ304	Blackhawk Mountain	0	
6	SJ306	Hermosa	50,895	The area would enhance the National Wilderness Preservation System by incorporating the west side of the Hermosa drainage, from the lower-elevation ponderosa pine to the top of Hesperus Mountain.
7	SJ240	San Miguel	0	The area would not add significantly to the National Wilderness Preservation System. Proposed management under all of the alternatives would protect Wilderness characteristics while, at the same time, allowing for additional management tools not allowed under Wilderness protection. Recreation use (including mechanized travel) would be allowed while, at the same time, maintaining the character of the area.
8	SJ303	West Needle	0	Same as Number 7.
9	SJ302	East Animas	0	Same as Number 7.
10	SJ309	Baldy	0	Same as Number 7.
11	SJ294	Florida River	0	Same as Number 7.
12	SJ293	Runlett Park	0	Same as Number 7.
14	SJ292	Piedra Area Adjacent	0	Same as Number 7.
15	SJ291	Graham Park	0	Same as Number 7.
16	SJ320	Weminuche Adjacent	1,428	The area would enhance Wilderness management of the existing Weminuche Wilderness Area by improving the boundary.
17	SJ286	Turkey Creek	578	The area would enhance Wilderness management of the existing Weminuche Wilderness Area by improving the boundary.
18	SJ285	Treasure Mountain	0	The area would not add significantly to the National Wilderness Preservation System. Proposed management under all of the alternatives would protect Wilderness characteristics while, at the same time, allowing for additional management tools not allowed under Wilderness protection. Recreation use (including mechanized travel) would be allowed while, at the same time, maintaining the character of the area.
19	SJ284	South San Juan Adjacent	0	Same as Number 18.

## ENVIRONMENTAL CONSEQUENCES

### DIRECT AND INDIRECT IMPACTS

#### General Impacts

Areas Recommended for Wilderness - Under Alternative B, approximately 55,533 roadless acres would be recommended for Wilderness. Under Alternative C, approximately 526,344 roadless acres would be recommended for Wilderness. Alternatives A and D would not propose any areas for Wilderness. A “Recommended Wilderness” determination, however, would not create a Wilderness Area. Congress must pass legislation designating areas as Wilderness. All of the areas recommended for Wilderness would be under a MA 1 allocation, which would protect the characteristics that make the area suitable for Wilderness designation. The areas recommended for Wilderness were identified using indications of public support, as well as information and data regarding the area’s representation of special features (including large areas or topography that provides opportunities for solitude and primitive recreation; underrepresented geology and landforms, especially sedimentary geology and canyons; boundaries contiguous with existing Wilderness Areas; or areas recommended for Wilderness under other Federal ownership). The presence of wildlife species (including Canada lynx, Colorado cutthroat trout, water vole, sage-grouse, and/or pine marten), as well as records of bighorn sheep sightings, were considered. Sensitive plants, rare taxa, and their representative vegetation communities were also considered. The presence of cover types underrepresented in existing Wilderness Areas were identified as special features (including grasses, sagebrush, aspen, cottonwood/willow, Douglas-fir, limber pine, ponderosa pine, and pinyon-juniper). (See Appendix C, Volume 3, Roadless Areas Inventory, for additional documentation of the special features of each area.)

The areas recommended for Wilderness are typically somewhat smaller than the inventory areas. However, under Alternative C, all of the IRAs (except for the HD Mountains) would be recommended for designation as a Wilderness Area, or as a Wild and Scenic River (WSR), or as a Research Natural Area (RNA). The HD Mountains IRA would not be available for Wilderness. This is because 88% of the area is leased for oil and gas development.

#### Impacts Related to Management Area Allocations

Table 3.34.5 shows the distribution of roadless acres inventoried for the DLMP/DEIS, cross the range of MA, by alternative.

**Table 3.34.5 – Roadless Acres in Management Areas by Alternative**

MANAGEMENT AREA	ALTERNATIVE A (NO-ACTION ALTERNATIVE)	ALTERNATIVE B (PREFERRED ALTERNATIVE)	ALTERNATIVE C	ALTERNATIVE D
1	1,803	113,286	528,173	16,321
2	522	41,601	29,417	28,879
3	384,379	371,014	1	418,754
4	45,381	25,312	183	27,109
5	119,107	464	508	55,657
7	0	4,181	0	4,196
8	7,090	2,423	0	7,366

The MA allocations are assigned to three broad groups (see Table 3.34.6). Assignments are based on the desired condition, design criteria, and the overall theme for the MA. The first group includes MAs with that would have the potential to retain Wilderness qualities based on the roadless inventory criteria. The second group includes any of the remaining MAs that would have the potential to retain roadless characteristics based on FSM 1920. The third group, generally, would not have roadless characteristics.

**Table 3.34.6 – Implications for Wilderness and Roadless by Management Area Group**

IMPLICATIONS	MANAGEMENT AREA	MANAGEMENT AREA GROUP #
Allocations that generally retain the potential to be capable of, and available for, Wilderness designation	1, 3	1
Allocations that generally retain roadless characteristics	1, 2, 3	2
Allocations that are generally inconsistent with the roadless characteristics defined by the Roadless Area Conservation Rule	4, 5, 7, 8	3

Generally, the areas under Group 1 would be undeveloped. These areas would have no classified roads, and very limited developed facilities (e.g., trails or signs). Generally, the areas under Group 2 would not be available for new roads or road reconstruction (although motorized use of existing roads and trails may continue). These areas would generally not allow for the cutting, sale, or removal of timber; however, certain exceptions are included in the Roadless Area Conservation Rule (RACR). The areas under Group 3 would allow activities that area inconsistent with the RACR, provided such activities were approved after separate, site-specific environmental analysis was conducted.

Table 3.34.7 shows the roadless acres and percentages that generally retain Wilderness potential, or RACR characteristics (Roadless characteristics would allow for motorized use on existing roads and motorized trails).

**Table 3.34.7 – Distribution of Roadless Acres by Management Area Groups by Alternative**

MANAGEMENT AREA	ALTERNATIVE A (NO-ACTION ALTERNATIVE)	ALTERNATIVE B (PREFERRED ALTERNATIVE)	ALTERNATIVE C	ALTERNATIVE D
<b>Management Area Group 1:</b> Allocations that generally retain the potential to be capable of and available for Wilderness designation based on management area direction.				
<i>Acres in Group</i> <i>Percent of Roadless Acres in Group</i>	386,182 69%	484,301 87%	528,174 95%	1435,075 78%
<b>Management Area Group 2:</b> Allocations that generally retain roadless characteristics defined by the RACR, not including those in Group 1.				
<i>Acres in Group</i> <i>Percent of Roadless Acres in Group</i>	552 <1%	41,601 7%	29,417 5%	28,879 5%
<b>Management Area Group 3:</b> Allocations that is generally inconsistent with the RACR.				
<i>Acres in Group</i> <i>Percent of Roadless Acres in Group</i>	171,579 30%	32,380 6%	691 <1%	94,328 17%

**DLMP/DEIS Alternatives:** The highest percentage of Wilderness potential in Management Area Group 1 would be proposed under Alternative C (approximately 95%). Alternatives B (approximately 87%) and Alternative D (approximately 78%) would propose lesser amounts. The least Wilderness potential would be proposed under Alternative A (greater than 69%).

The highest percentage of roadless potential would be proposed under Alternative C (approximately 99%). Alternatives B (approximately 94%) and Alternative D (approximately 83%) would propose lesser amounts. The least roadless potential would be proposed under Alternative A (approximately 70%). These numbers are based on the sum of MA Groups 1 and 2. From most consistent with the RACR to least consistent with the RACR, the alternatives would rank as: C, B, D, A.

### Impacts Related to Livestock Grazing

The Wilderness Act (Section 4(d)(4)) allows livestock grazing “where established prior to the effective date of this Act... subject to such reasonable regulations as are deemed necessary.” Permitted grazing would continue in IRAs, and there would be a minor increase in grazing.

**DLMP/DEIS Alternative:** The impacts related to livestock grazing on Wilderness and IRAs may be similar under all of the alternatives.

### Impacts Related to Recreation Management

Areas recommended for Wilderness would be managed in the same manner as lands currently designated as Wilderness. Opportunities for primitive and non-motorized recreation would be featured in IRAs recommended for Wilderness designation. This is because these areas would provide the best opportunities for solitude, as well as exhibit the absence of motorized or mechanized vehicles and the absence of human developments. Alternative B and C would provide areas managed and recommended for Wilderness; Alternative A and D would not. Recommendation of an area for Wilderness designation may, in turn, lead to a moderate increase in recreation use and in the subsequent development of related facilities (including trailheads and site administration).

IRAs that are assigned to other MAs would be managed for the recreation opportunities available under those MAs. Generally, the existing settings are remote and Semi-Primitive (ROS) in character, although motorized trails occur in some areas. Snowmobiles traveling over snow (on trails or cross-country) would occur in some IRAs. The alternatives, ranked from proposing the largest to least amount of acres with remote, Semi-Primitive (ROS) settings are: Alternatives C, B, A, and D. IRAs managed in order to preserve their roadless qualities may be at risk from the recreational use of all-terrain vehicles (ATVs). User-created motorized routes have encroached upon some IRAs. This long-term impact related to motorized use may result in a moderate loss of roadless values. This impact would be mitigated in accordance with the 2005 Travel Management Rule, which requires motorized over-ground use to be on designated routes. As a result, short-term impacts may result from off-road over-ground motorized use in IRAs; however, over the long term, impacts may improve the roadless qualities under all of the alternatives.

**DLMP/DEIS Alternatives:** Alternative C may result in greatest beneficial impacts to Wilderness Areas and to IRAs, followed by Alternatives B, A, and D. This would be mainly due to MA designations that would retain and protect remote, Semi-Primitive (ROS) non-motorized settings.

### **Impacts Related to Timber Management**

IRAs that allocated to Management Area 1 (recommended Wilderness) would not be available for timber harvesting. IRAs are allocated to MAs other than recommended Wilderness may be available for vegetation treatments, including timber harvesting, consistent with the standards and guidelines found in the approved LMP.

**DLMP/DEIS Alternatives:** Alternatives D and A may result in impacts to portions of some IRAs, as a result of timber harvesting. Those impacts may be minor, and may primarily occur along the fringes of the IRAs. Alternatives B and C may result in the least impacts to IRAs. This is because road construction associated with timber harvesting would generally not be allowed.

### **Impacts Related to Travel Management**

Depending upon travel suitability and MA allocations, IRAs may provide a variety of travel opportunities. IRAs recommended for Wilderness (MA 1) would permit foot and horse travel, and would prohibit motorized and mechanized travel. Other MA designations would allow for some motorized and mechanized recreation. The impacts to IRAs related to travel management may be the same as the impacts related to recreation management.

MAs that would not allow additional road construction may result in the least impacts to IRAs. Alternatives B and C may have the least impacts, therefore, on IRAs. Alternatives A and D would propose the most IRAs under prescriptions allowing road construction. The impacts from travel management requiring the use of existing trails, may help mitigate overall IRA qualities, as long as the trails were well designed. Newly constructed roads (even if closed to recreational motorized use) may result in adverse impacts to IRA qualities.

**DLMP/DEIS Alternatives:** Overall, travel management designations under Alternative C may result in the greatest beneficial impacts to Wilderness Areas and to IRA, followed by Alternatives B, A, and D. This is because they would retain and protect remote, Semi-Primitive (ROS) non-motorized settings.

### **Impacts Related to Special Area Designations**

Under all of the alternatives, RNA proposals (MA 2) and WSR recommendations would overlap portions of the Wilderness Areas and IRAs, and, therefore, may result in no impacts to the capability or need for Wilderness recommendation. This is because their management would be compatible with the management of Wilderness Areas, WSAs, and proposed Wilderness Areas. RNA and WRS designations would protect Wilderness values, even if the areas were managed for other purposes.

**DLMP/DEIS Alternatives:** The impacts related to special area designations would be the same under all of the alternatives.

### **Impacts Related to Fire and Fuels Management**

Under MA 1s, bulldozers would not be used in order to manage wildfire. Wildland Fire Use (WFU) (i.e., a fire started by lightning, but allowed to burn under prescribed conditions) may occur under MA 1s, 2s, and 3s, if site-specific fire management planning is completed. Fuels treatment would be allowed under MA 1s, 2s, and 3s, when it is compatible with Wilderness values. Impacts from fire and fuels management may be mitigated by policy and process, and may result in impacts to IRA qualities.

**DLMP/DEIS Alternatives:** The impacts related to fire and fuels management may be the same under all of the alternatives.

### **Impacts Related to Oil, Gas, and Minerals Development**

IRAs under MA 1s would be administratively unavailable for oil, gas, and mineral development; therefore, they would be largely unaffected by development. All other IRAs may be potentially impacted by the development of minerals under the mining law, posing some conflict with Wilderness values.

IRAs under MAs where no surface occupancy (under a NSO stipulation) is allowed for oil and gas development, may generally, be less impacted by development than would IRAs allocated to MAs with controlled surface use (under a CSU stipulation). Areas with standard lease terms may have the least protection from impacts related to oil and gas development. It is likely that oil and gas wells would be drilled on existing leases in the HD Mountains IRA. The other IRAs in the planning area may have low to moderate potential for development.

**DLMP/DEIS Alternatives:** In terms of area more likely to be impacted by oil, gas, and minerals development, to acres less likely to be impacted, the Alternatives would rank as A, D, B, and C. If no new leases were made available, the impacts to the Roadless characteristics would be similar to the impacts under all alternatives because most of the development will occur on existing leases.

## CUMULATIVE IMPACTS

IRA characteristics are changed as the result of many types of development (including roads, timber management, recreation facilities, and reservoirs). Although the total acres developed in the past planning period was relatively small, the decrease in acres with roadless characteristics is a long-term and continuing trend (although perhaps not noticeable within the implementation-life of the final approved LMP). Historically, the development of roads and the management of timber stands has impacted the most acres. This trend, however, has slowed dramatically, and is likely to continue to decline in the future.

Development of private in-holdings, as well as oil and gas development (especially in the HD Mountains IRA) has been the primary reason for the loss of roadless characteristics. The impact of development extends from the past into the future, and would apply to the general planning area (outside of Wilderness Areas). The impacts may be least under Alternative B and C (where areas are recommended for Wilderness designation), and the greatest under Alternatives A and D. Under a no leasing scenario all of the roadless areas except for the HD's and 974 acres of the South San Juan Adjacent would not have any potential for oil and gas exploration.

Off-highway vehicle (OHV) use (including jeeps, SUVs, ATVs, mountain bikes, motorcycles, and other vehicles) has increased within the planning area. A motorized or mechanized rider can travel across larger areas in a shorter amount of time than most other recreation users; therefore, the demand for access to more terrain is likely to increase. Advocates for OHV/mountain bike users are expected to request increased access to IRAs. Unauthorized motorized routes, both roads and trails, have been created and/or extended within the planning area. The lack of adequate well-maintained signs contributes to this problem. Use of unauthorized routes has occurred in both roaded and unroaded parts of the planning area. If this use continues, it may diminish IRA values. As local and national populations continue to age, the demand for easier access, primarily vehicle access, to destinations with IRAs is expected to increase. The current impacts related to user-created routes is widespread within the planning area. User-created routes, however, are expected to decline in the future (as a result of the elimination of areas open to cross-country use under all of the alternatives and as a result of the restoration of existing user-created routes). The impacts related to user-created routes are expected to decline in the future under Alternative C (as a result of prohibiting motorized use in areas recommended for Wilderness Area designation). Currently, instances of unauthorized use are managed through peer pressure and through law enforcement. The implementation of the 2005 Travel Management Rule and EMS may move the trend away from unauthorized use.

IRAs may be impacted by development activities and motorized recreation. Impacts to IRA qualities can be generally ranked in terms of most impacts to least impacts: Alternatives A, D, B, and C, respectively.