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# Wilderness Resources

## Introduction

This report evaluates and discloses the potential environmental consequences to wilderness resources that may result with the adoption of a revised land management plan. Wilderness resources include designated wilderness, the primitive area and presidential additions, and recommended wilderness. The report examines, in detail, four different alternatives for revising the 1987 Apache-Sitgreaves National Forests (Apache-Sitgreaves NFs) land management plan (1987 plan).

## Relevant Laws, Regulations, and Policy that Apply

Wilderness Act of 1964

PL 91-504 - Designation of Mount Baldy Wilderness

PL 98-406 - Designation of Escudilla and Bear Wallow Wilderness Areas. The Act also released the RARE II roadless areas in Arizona.

36 CFR 293 - Wilderness - Primitive Areas

FSM 1923 - Wilderness Evaluation

FSM 2300 - Recreation, Wilderness, and Related Resource Management; Chapter 2320 - Wilderness Management

FSH 1909.12 - Land Management Planning Handbook, Chapter 70 - Wilderness Evaluation

## Methodology and Analysis Process

For this analysis three topics are addressed related to wilderness resources: designated wilderness, existing primitive area and presidential additions, and potential (recommended) wilderness. The presence of each of the above areas, along with the existing condition, is analyzed. The only wilderness resource that changes by alternative is recommended wilderness. Therefore, the majority of analysis describes the environmental consequences of recommending different acreages for wilderness.

## Assumptions

In the analysis for this resource, assumptions and key policies used include:

- All acreage figures are approximate. They were calculated using the data available in the Apache-Sitgreaves NFs' Geographic Information System (GIS) databases.
- The GIS data used for the potential wilderness inventory and subsequent analysis was "frozen" at the start of the inventory process in 2007. This was done to maintain a consistent data source throughout the wilderness evaluation process, because the forests' GIS databases are updated on a regular basis.

- All designated wilderness is managed according to the Wilderness Act, 36 CFR 293, appropriate Forest Service manuals and handbooks, and the forest plan.
- The entire Blue Range Primitive Area (including the Blue Road) and the 1971 presidential additions to the primitive area are managed according to 36 CFR 293.17, appropriate Forest Service manuals and handbooks, and the forest plan.
- All recommended wilderness is managed in conformance with the desired conditions, standards, and guidelines presented in the forest plan.
- The Hells Hole, Nolan, and Mother Hubbard potential wilderness areas (a total of 26,023 acres) are managed to protect their wilderness characteristics until a decision is made in the revised Gila NF land management plan as to whether or not to recommend these areas for wilderness designation. They are included in the Natural Landscape Management Area (MA) in Alternatives B, C, and D.
- Livestock management in the wilderness and primitive areas is in conformance with the Congressional Grazing Guidelines (FSM 2320 - Wilderness Management. 2323.22 - Exhibit 01, Congressional Grazing Guidelines).
- Any area that is “recommended for wilderness” (Recommended Wilderness MA) through the planning process is a preliminary administrative recommendation that will receive further review, including applicable NEPA analysis, and possible modification by the Chief of the Forest Service, Secretary of Agriculture, and the President of the United States. Congress has reserved the authority to make final decisions on wilderness designation.
- Wildfire is considered a natural ecological process. Designated wilderness, the Blue Range Primitive Area and presidential additions, and potential wilderness that burned in the 2011 Wallow Fire retain their wilderness character.

## **Revision Topics Addressed in this Analysis**

Wilderness resources are part of the “Managed Recreation” revision topic.

The indicator for wilderness resources is the amount of recommended wilderness as measured by acres for each alternative.

## **Summary of Alternatives**

A summary of alternatives, including the key differences among alternatives, is outlined in the Draft Environmental Impact Statement. Table 1 is included here for clarification.

**Table 1. Alternative Summary for Wilderness Resources**

	Alternative A	Alternative B	Alternative C	Alternative D
Designated Wilderness	No change - 3 designated wilderness areas			
Blue Range Primitive Area and Presidential Additions	No change - entire area is managed to protect and maintain wilderness characteristics			
Portion of primitive area recommended for wilderness	No change - 1971 presidential recommendation			1971 presidential recommendation with addition of 4 areas and part of another previously excluded
Recommended Wilderness	none	additions to Escudilla and Bear Wallow Wilderness areas	addition to Escudilla Wilderness	additions to Escudilla, Bear Wallow and Mount Baldy Wilderness areas  additions to Blue Range Primitive Area  23 new areas

## Description of Affected Environment (Existing Condition)

### Designated Wilderness

The Apache-Sitgreaves NFs include three designated wilderness areas: Mount Baldy, Escudilla, and Bear Wallow (Figure 1 in Appendix B and Table 2). The total wilderness acres are 23,233. Wilderness areas are managed according to the Wilderness Act of 1964 which protects their wilderness values. Wilderness areas provide outstanding opportunities for solitude or a primitive and unconfined type of recreation. They also provide wildlife habitat and a variety of natural resource and social values. Motorized and mechanical equipment use is prohibited in wilderness. Livestock grazing is allowed in wilderness areas, unless specifically excluded by the law designating the area. The laws listed below do not restrict grazing in any of the Apache-Sitgreaves NFs wilderness areas.

**Table 2. Apache-Sitgreaves NFs Wilderness Areas**

Wilderness	Year Designated	Law No.	Acres	Ranger District
Mount Baldy	1970	PL 91-504	6,842	Springerville
Escudilla	1984	PL 98-406	5,157	Alpine
Bear Wallow	1984	PL 98-406	11,234	Alpine

## **Mount Baldy Wilderness**

Mount Baldy Wilderness was designated as part of the National Wilderness Preservation System in 1970. It lies on the eastern slope of Mount Baldy. Elevations range from 9,000 feet to 11,400 feet above sea level. Mount Baldy is an extinct volcano, which experienced three distinct periods of glaciation. The peak's summit is on the Fort Apache Indian Reservation.

There are three developed trails, totaling 18 miles, in Mount Baldy Wilderness. This trail system is heavily used by day hikers from mid-May through late September, with the heaviest use on weekends and holidays. Trail encounters with other hikers and equestrians are common. Annual trail maintenance consists of removing fallen trees and cutting brush. Two trailheads provide access to Mount Baldy Wilderness.

The majority of Mount Baldy Wilderness is spruce-fir forest with blue spruce, Engelmann spruce, white fir, and corkbark fir. The remaining forested areas are wet and dry mixed conifer forests, including the above species, Douglas-fir, white pine, and ponderosa pine. A spruce budworm infestation has killed a portion of the spruce forest. Tree composition varies with elevation but Douglas-fir and blue spruce are the principal species. Aspen is interspersed throughout the forests. The remainder of the area is montane/subalpine grasslands and wetland/cienega riparian areas along the upper Little Colorado River drainages.

The wilderness boundary is defined by the forests' boundary with the Fort Apache Indian Reservation and partially by fences on the east. Motor vehicle use in the upper Hall Creek watershed, between Mount Baldy Wilderness and Highway 273, was restricted through a special order in 2001. Prior to the special order, camping occurred immediately adjacent to the wilderness boundary, which led to a large amount of motorized trespass. This action has eliminated all motor vehicle trespass in the wilderness north of the West Fork Little Colorado River. In recent years, there has been an increase in motor vehicle trespass from the Burro Mountain area, east of the southeast wilderness boundary. Signing and improved boundary fencing have been installed.

## **Escudilla Wilderness**

Escudilla Wilderness encompasses the top and sides of Escudilla Mountain. It includes several high elevation meadows that contain relatively rare plant associations. Potential natural vegetation types (PNVTs) in the wilderness include spruce-fir forest, wet mixed conifer forest, montane/subalpine grasslands, wetland/cienega riparian areas, and ponderosa pine forest.

Notable landmarks in or just outside the wilderness include Profanity Ridge, Terry Flat, Toolbox Draw, and the Punchbowl. There are two trails, totaling about 6 miles, in this wilderness. Escudilla Trail receives heavy day-use during the summer and fall. Government Trail connects with Escudilla Trail part way to the top, but starts at a different trailhead and receives less use. The wilderness boundary is generally not discernible on the ground because it occurs at mid-slope on the mountain.

## **Bear Wallow Wilderness**

Bear Wallow Wilderness is known for its canyon, large old conifers, and fall aspen colors. Bear Wallow Creek is perennial, providing habitat for the threatened Apache trout. Wildlife is abundant throughout the area. There are five trails, totaling 20 miles, in Bear Wallow Wilderness that provide access into and within this area. There are four trailheads, three along the north boundary and one on the south. The wilderness boundary is generally defined by roads, the Mogollon Rim,

and the forests' boundary. PNVTs in Bear Wallow Wilderness include wet mixed conifer forest, ponderosa pine forest, Madrean pine-oak woodland, dry mixed conifer forest, spruce-fir forest, montane willow riparian forest, and wetland/cienega riparian areas.

### **Wilderness Uses**

The 2002 National Visitor Use Monitoring program estimated 32,000 visits to the three wilderness areas (U.S. Forest Service 2006). Of those visitors, 81 percent were male, 19 percent were female, 92 percent were white, and more than 63 percent were between 31 and 60 years of age. Most wilderness visitors were from the southern Arizona metropolitan areas (Phoenix and Tucson) or the local area. The average length of stay was 4.6 hours, indicative of the high amount of day-use the areas receive. Less than 1 percent of those interviewed used the services of a commercial guide (Kocis et al. 2002).

Wilderness visitors felt there were few people there. Overall, wilderness visitors were satisfied with their visit to the Apache-Sitgreaves NFs. The only categories, possibly related to the wilderness experience, where visitor satisfaction could be improved were condition of the natural environment and signing adequacy. It is not known if these concerns were specifically for the wilderness areas or for the forests in general.

There is no permit system in place for managing visitor access to the wilderness areas. However, Mount Baldy Wilderness has group size limits of 6 people per party for overnight camping and 12 people per party for day-use hiking and horseback riding. These group size limits were set to maintain the desired condition of opportunities for solitude and a semi-primitive recreation. Maximum group size limits for Escudilla and Bear Wallow Wilderness areas are 25 people and/or 35 horses. The 1987 plan does not allow pack stock grazing in wilderness.

Presently, there are an unknown number of campsites within Mount Baldy Wilderness. Inventories in 1990 and 1991 identified approximately 200 campsites, of which 50 were naturalized. No additional inventories have been conducted and no additional campsites have been rehabilitated. There are very few campsites in Escudilla Wilderness because summer weather conditions discourage overnight use. No campsite inventory is available for Bear Wallow Wilderness, but most campsites are along Bear Wallow Creek.

Authorized livestock grazing has not occurred recently in any of the Apache-Sitgreaves NFs' wildernesses. Livestock grazing in Mount Baldy Wilderness has not occurred since 1992, when an agreement between the Forest Service and the livestock permittee was implemented to avoid listing of the Arizona willow under the Endangered Species Act of 1973. The Greer Allotment Management Plan (AMP) decision (dated March 23, 1999) removed grazing from Mount Baldy Wilderness. Removal was based on Arizona willow protection, limited forage availability, and conflicts with recreation and riparian resource values. The South Escudilla AMP decision (dated February 13, 2001) removed grazing from Escudilla Wilderness. Removal was based on limited forage and water availability, dense timber, conflicts with recreational users, presence of wild ungulates and predators, and limited access and ability to manage and gather livestock. The KP Summer Pasture, which includes Bear Wallow Wilderness, was waived back to the Forest Service in November 2001. The limited amount of forage has not been reallocated.

## **Wilderness Management Concerns**

All three wilderness areas have motorized and mechanized vehicle trespass issues. The greatest problems occur in Mount Baldy Wilderness. Even though Mount Baldy Wilderness boundaries are signed and fenced, motorized vehicle trespass often occurs along the southeast boundary from the Burro Mountain area, snowmobiles trespass along the eastern boundary during the winter, and mountain bikes and ATV tracks are occasionally found on the trails. Occasionally, ATVs and mountain bikes trespass in Escudilla Wilderness. In 2005, a jeep drove up Toolbox Draw from the southern wilderness boundary. In 2007, two ATVs drove up the Escudilla National Recreation Trail to the lookout. During hunting season, ATVs regularly trespass into Bear Wallow Wilderness from Rose Spring Trailhead.

The Fort Apache Indian Reservation abuts Mount Baldy Wilderness on its northwest, southwest, and south boundaries. These adjacent reservation lands are closed to all public entry. This often causes confusion and conflict because Baldy Peak, the highest point, is on reservation lands and only a very small portion of Mount Baldy, the ridge that includes Baldy Peak, is on the Apache-Sitgreaves NFs. The Apache-Sitgreaves NFs/reservation boundary is poorly signed so many travelers do not recognize the boundary. One-quarter mile of East Baldy Trail, near the Mount Baldy summit, was relocated to discourage hikers and equestrians from continuing onto the reservation.

Livestock from the reservation trespass into Mount Baldy Wilderness annually and often remain there until they return home on their own.

## **Blue Range Primitive Area and Presidential Additions**

The Blue Range Primitive Area (179,153 acres) is the only remaining primitive area in the National Forest System (NFS) and is located on the Alpine and Clifton Ranger Districts (Figure 1 in Appendix B). It was administratively designated by the Forest Service (L-20 regulations<sup>1</sup>) as a primitive area on June 21, 1933 to preserve its wilderness qualities.

In 1971, the Forest Service submitted a recommendation to the President of the United States for the Blue Range Wilderness in New Mexico and Arizona. The president forwarded the recommendation to Congress, who eventually acted on a portion of the recommendation. In 1980, Congress designated, and the president signed into law (PL 96-550), the Blue Range Wilderness in New Mexico. The Arizona portion of the 1971 presidential recommendation included 20,031 acres outside and along the west primitive area boundary (total of 166,591 acres). Congress has not acted on the Forest Service and presidential recommendation for the Blue Range Wilderness in Arizona and the 1971 recommendation remains in place. The 1987 plan recognizes this in Management Area 8, Blue Range Primitive Area and Additions.

The entire Blue Range Primitive Area and the presidential recommendation additions (199,505 acres) (BRPA) have been managed to protect their wilderness characteristics. The area is managed like wilderness, except that it is open to mineral prospecting and mineral development (Forest Service Manual 2320.3(11)). The BRPA, including the portions that were excluded from the 1971 presidential recommendation, was reevaluated as part of the potential wilderness

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<sup>1</sup> In 1939, the Secretary of Agriculture issued Regulations U-1, U-2, and U-2A (collectively, the "U-Regulations") to replace the L-20 Regulation.

evaluation process and most of the BRPA was found to have wilderness characteristics (Potential Wilderness Evaluation Reports PW-03-01-068 and PW-03-01-069, U.S. Forest Service 2012g).

The BRPA includes deep, rugged canyons separated by steep, timbered ridges. The Mogollon Rim bisects the area and provides dramatic topographic features. Elevations range from 4,500 feet in the southern portion to 9,100 feet along the rim. This rapid change in elevation results in interesting and unique ecological associations. Unusual and spectacular rock formations highlight the scenery.

The wide variety of PNVTs reflects the area's topography. PNVTs include Madrean pine-oak woodland, ponderosa pine forest, wet mixed conifer forest, spruce-fir forest, ponderosa pine forest, dry mixed conifer forest, interior chaparral, semi-desert grassland, mixed broadleaf deciduous riparian forest, piñon-juniper woodland, cottonwood-willow riparian forest, and wetland/cienega riparian areas. Fire has been allowed to play a natural role in the primitive area ecosystem. In the last 20 years, approximately 40 percent of the BRPA has burned through use of unplanned ignitions to accomplish specific resource objectives.

The area is important in the distribution of wildlife species. It lies on both north-south and east-west migration corridors. Mule deer were abundant in the 1980s, but numbers have declined in recent years, while elk populations have fluctuated. Threatened, endangered, and candidate species that occur in the area include Mexican spotted owl, Apache trout, Gila trout, loach minnow, western yellow-billed cuckoo, Mexican gartersnake, Chiricahua leopard frog, and New Mexico meadow jumping mouse. Forest Service sensitive species include northern goshawk, bald eagle, American peregrine falcon, Arizona Bell's vireo, narrow-headed gartersnake, Arizona toad, lowland leopard frog, longfin dace, Sonora sucker, and desert sucker. Mexican wolves were re-introduced into the general area in 1998.

There are approximately 290 miles of non-motorized trails throughout the area; this number has not changed since 1984. Presently, some trails may not be passable because their maintenance has been deferred or they have been damaged by fire or flooding. In some locations, especially in the Hannagan Meadow area, increased visitor use has created a need for more trail maintenance. Many trails in the Blue Range Primitive Area are located in drainages and along creeks; some resource damage may be occurring in these locations. Access for the Blue River Trail was recently improved with the acquisition of an Arizona Game and Fish Department easement through private property and the construction of a new trailhead.

Visitor use in 1984 for the Blue Range Primitive Area was estimated at 7,000 recreation visitor days. Most of this use occurred during the fall hunting seasons. At that time, it was felt that the quality of the wilderness experience was not impaired and user expectations were met. There are no current use figures for the Blue Range, but over the last 10 years, Forest Service personnel have noticed increasing summer use. There is no permit system for managing visitor access to the primitive area. However, maximum group size is 25 people and/or 35 horses. The 1987 plan does not allow pack stock grazing in wilderness or the primitive area.

## **Potential Wilderness**

Apache-Sitgreaves NFS lands were inventoried, as part of the plan revision process, to determine if any of the lands outside of designated wilderness areas contain wilderness characteristics. Fifty-five areas were initially identified that met the criteria of not containing forest or permanently authorized roads and being at least 5,000 acres or if less than 5,000 acres are adjacent to existing

wilderness or primitive area. Each of these areas was assigned an ID number (e.g., PW-03-01-xxx). Next, portions of the areas which had been logged or treated, had developed recreation sites, or included power lines were excluded. In some cases, an area was split by a power line resulting in two areas, each at least 5,000 acres. One of the split areas retained the original ID number and the second was assigned a new ID number. Twelve additional areas were created thusly. Next, the R3 criteria for roaded areas, fingers, and extrusions were applied to exclude areas that do not meet the purpose of considering an area for wilderness potential. If at any time during the inventory process an area was reduced to less than 5,000 acres, it was excluded from further consideration unless it was adjacent to existing wilderness or primitive area or could be effectively managed as a separate unit; 26 areas were excluded. The ID numbers of these 26 areas were not reassigned to new areas, so they do not appear in Table 3. Finally, the inventory areas were screened to determine if they met the statutory definition of wilderness as outlined in Section 2(c) of the Wilderness Act<sup>2</sup>. Seven areas were found to not meet the definition. Thirty-four inventory areas were found to meet the size and lack of roads criteria and the statutory definition of wilderness. Additional information on the inventory process can be found in Forest Service Handbook 1909.12, Chapter 70, Section 71 and the R3 Potential Wilderness Inventory Process document. Information on all inventoried areas can be found in the Plan Set of Documents.

Next, in-depth evaluations of wilderness capability, availability, and need were completed for the 34 areas. Two additional evaluations were completed for the 1971 Blue Range Wilderness presidential recommendation in Arizona and for the portions of the Blue Range Primitive Area that were not recommended for wilderness, bringing to 36 the total number of areas evaluated. Of these, one entire area (PW-03-01-012) did not meet the capability criteria and was dropped from further consideration. Another area (PW-03-01-069, exclusion 1a) did not meet the capability criteria, so boundary adjustments were made to retain the polygons that did meet the criteria. Three areas in the vicinity of Escudilla Mountain were also evaluated because all or portions of the areas are included in Alternatives B, C, and D.

A total of 714,938 acres in 38 areas (Figures 2 and 3 in Appendix B and Table 3) were found to have wilderness potential. Additional information on the evaluation process and individual area evaluations can be found at on the forests' Web site: <http://www.fs.usda.gov/asnf/> and in the Plan Set of Documents.

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<sup>2</sup> an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; . . .

**Table 3. Areas with Wilderness Potential**

<b>ID Number</b>	<b>Potential Wilderness</b>	<b>Acres</b>	<b>Ranger District</b>
PW-03-01-001	Leonard Canyon <sup>1</sup>	22,406	Black Mesa
PW-03-01-003	West Chevelon Canyon	9,493	Black Mesa
PW-03-01-005	Chevelon Canyon	9,421	Black Mesa
PW-03-01-006	Wildcat Canyon South	6,972	Black Mesa
PW-03-01-011	Black Canyon	4,913	Black Mesa
PW-03-01-021	Mount Baldy Wilderness Addition North	992	Springerville
PW-03-01-022	Mount Baldy Wilderness Addition South	1,031	Springerville
PW-03-01-029	Escudilla Wilderness Addition Northeast	1,161	Alpine
PW-03-01-035	Escudilla Wilderness Addition Southeast	6,039	Alpine
PW-03-01-040	Mother Hubbard	2,656	Alpine
PW-03-01-041	Campbell Blue	9,445	Alpine
PW-03-01-042	Nolan	7,842	Alpine
PW-03-01-043	Blue Range Primitive Area Addition North	4,184	Alpine
PW-03-01-044	Horton-Willow	6,503	Alpine
PW-03-01-046	Black River Canyon East	11,327	Alpine
PW-03-01-047	Black River Canyon West	5,718	Alpine
PW-03-01-049	Hot Air/Salt House	76,129	Clifton/Alpine
PW-03-01-050	Sheep Wash	7,965	Clifton
PW-03-01-051	Painted Bluffs	44,107	Clifton
PW-03-01-052	West Blue/San Francisco <sup>2</sup>	160,016	Clifton/Alpine
PW-03-01-053	Cold Spring Mountain	17,541	Clifton
PW-03-01-054	Hells Hole	15,524	Clifton
PW-03-01-055	Blue Range Primitive Area Addition Southeast	1,255	Clifton
PW-03-01-056	Chevelon Canyon North	6,673	Black Mesa
PW-03-01-057	Coal Creek	5,698	Clifton
PW-03-01-058	Big Lue Mountains	5,222	Clifton
PW-03-01-060	Centerfire <sup>3</sup>	15,269	Alpine
PW-03-01-062	Chevelon Lake	6,585	Black Mesa
PW-03-01-063	Milk Creek	5,387	Alpine
PW-03-01-064	Bear Wallow Wilderness Addition Northwest	172	Alpine
PW-03-01-065	Escudilla Wilderness Addition West	484	Alpine
PW-03-01-066	Bear Wallow Wilderness Addition Southeast	1,207	Alpine
PW-03-01-067	Sunset	30,366	Clifton
PW-03-01-068	BRW Presidential Recommendation	166,393	Alpine/Clifton
PW-03-01-069	BRWPR <sup>4</sup> exclusion 1b	4,504	Alpine

ID Number	Potential Wilderness	Acres	Ranger District
PW-03-01-069, cont.	BRWPR exclusion 2a	1,037	Alpine
	BRWPR exclusion 2b	6,958	Clifton
	BRWPR exclusion 3	4,665	Clifton
	BRWPR exclusion 4	10,404	Clifton
	BRWPR exclusion 5	2,804	Alpine
PW-03-01-070	Escudilla North	377	Alpine
PW-03-01-071	Hulsey	2,926	Alpine
PW-03-01-072	South Escudilla Mountain	5,167	Alpine
	<b>Total Acres</b>	<b>714,938</b>	

<sup>1</sup> includes 2,981 acres on the Coconino NF

<sup>2</sup> includes 3,577 acres on the Gila NF

<sup>3</sup> includes 30 acres on the Gila NF

<sup>4</sup> Blue Range Wilderness Presidential Recommendation

There is considerable overlap between Inventoried Roadless Areas (IRAs) and areas with wilderness potential. When the forests' lands were inventoried for wilderness potential during the plan revision process, portions of some IRAs were found to not have wilderness characteristics (e.g., naturalness was affected by timber harvesting or road construction) or additional adjacent acreage was found to have wilderness characteristics. So, potential wilderness acres may not be the same as the IRA acres for an area with the same name (i.e., the acreage for Chevelon Canyon IRA (5,569 acres from Table 7) is not the same as Chevelon Canyon potential wilderness (9,421 acres from Table 3)). Also, two or more IRAs may have been included in one potential wilderness.

## Wallow Fire

In May and June of 2011, the Wallow Fire burned over 438,000 acres on the Apache NF and adjoining ownerships. Fire is considered a natural ecological process. The Wallow Fire affected all or portions of the following wilderness resources:

### Designated Wilderness:

Bear Wallow  
Escudilla

### Blue Range Primitive Area and Presidential Additions

### Potential Wilderness:

Mount Baldy Wilderness Addition South  
Escudilla Wilderness Addition Northeast  
Escudilla Wilderness Addition Southeast  
Mother Hubbard  
Campbell Blue  
Blue Range Primitive Area Addition North  
Horton-Willow  
Black River Canyon East  
Black River Canyon West

Hot Air/Salt House  
West Blue/San Francisco  
Centerfire  
Milk Creek  
Bear Wallow Wilderness Addition Northwest  
Escudilla Wilderness Addition West  
Bear Wallow Wilderness Addition Southeast  
Blue Range Wilderness Presidential Recommendation  
Blue Range Wilderness Presidential Recommendation Exclusions 1 and 5  
Escudilla North  
Hulsey  
South Escudilla Mountain

## **Environmental Consequences of Alternatives**

The land management plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Because the land management plan does not authorize or mandate any site-specific projects or activities (including ground-disturbing actions) there can be no direct effects. However, there may be implications, or longer-term environmental consequences, of managing the forests under this programmatic framework.

### **Designated Wilderness**

Bear Wallow, Escudilla, and Mount Baldy Wilderness areas would continue to be managed to protect and maintain their wilderness characteristics in all alternatives. The development and implementation of wilderness management plans for each area would further protect the areas and could enhance the recreation opportunities of wilderness users. In all alternatives, specific wilderness management concerns (livestock and vehicle trespass and boundary identification) would continue to be addressed at the project level.

Alternative A retains the existing group size limits for all wilderness areas as described in the Affected Environment section. Many existing wilderness campsites are located along streams and in sensitive riparian areas. The current group size limits could result in damage to campsites from even short-term use and are not conducive to providing opportunities for solitude. Also, groups using these areas have been smaller than the current limits.

Alternatives B, C, and D would modify the group size limits for Escudilla and Bear Wallow Wilderness areas. Group size would be reduced to 12 persons and/or 15 head of stock for hiking and riding groups. These new group size limits are compatible with Leave No Trace principles. The new group size would reduce the potential for resource damage at campsites, in meadows and riparian areas, and along trails and would enhance opportunities for solitude for all wilderness users. Alternatives B, C, and D would keep the current group size limits for Mount Baldy Wilderness.

### **Blue Range Primitive Area and Presidential Additions**

This analysis is limited to the Blue Range Primitive Area and presidential additions. The wilderness recommendations here are in addition to those analyzed in the Recommended Wilderness section below.

The entire BRPA (199,502 acres) would continue to be managed to protect and maintain its wilderness characteristics in all alternatives. Alternative A would retain the existing group size limits for the BRPA. Many existing primitive area campsites are located along streams and in sensitive riparian areas. The current group size limits could result in damage to campsites from even short-term use and are not conducive to providing opportunities for solitude. Also, groups using the BRPA have been smaller than the current limits.

Alternatives B, C, and D would modify group size limits for the BRPA. Group size would be reduced to 12 persons and/or 15 head of stock for hiking and riding groups. This new group size limit is compatible with Leave No Trace principles. The new group size would reduce the potential for resource damage at campsites, in meadows and riparian areas, and along trails and would enhance opportunities for solitude for primitive area users.

The amount of the BRPA that is currently recommended for wilderness (1971 presidential recommendation, 166, 591 acres) would remain the same in Alternatives A, B, and C (Table 4). There would be no effects from continuing this recommendation, because these lands are managed as primitive area.

**Table 4. BRPA Acres Recommended for Wilderness**

Management Area	Alt A (acres)	Alt B (acres)	Alt C (acres)	Alt D (acres)
Blue Range Primitive Area and Additions	166,591 <sup>1</sup>	-	-	-
Primitive Area	-	166,591 <sup>1</sup>	166,591 <sup>1</sup>	196,868

<sup>1</sup> 1971 presidential recommendation

The BRPA wilderness recommendation in Alternative D (196,868 acres) would be approximately 30,000 acres over the 1971 presidential recommendation. These additional acres are within the existing primitive area boundary, were re-evaluated for forest plan revision, and were found to have wilderness characteristics; a reflection of management of these lands as primitive area for the last 40 years. Recommending these additional acres would maintain manageability of the BRPA and would add eight underrepresented ecosystems to wilderness in the Southwestern Region.

### **Recommended Wilderness**

This analysis does not include the portions of the Blue Range Primitive Area and presidential additions that are recommended for wilderness. They are analyzed separately above.

Any area recommended for wilderness is assigned to the Recommended Wilderness MA. Those lands not recommended for wilderness would be managed according to Forest Service or Apache-Sitgreaves NFs forest plan guidance for the management area or special area (e.g., RNA, eligible wild and scenic river corridor) in which they occur. Table 5 shows the acreages recommended for wilderness in the four alternatives.

**Table 5. Acres Recommended for Wilderness by Alternative**

Alternative A (acres)	Alternative B (acres)	Alternative C (acres)	Alternative D (acres)
0	7,074	6,982	491,302 <sup>1</sup>

This table does not include the acres of the Blue Range Primitive Area and presidential additions that are recommended for wilderness.

<sup>1</sup> Includes 2,981 acres on the Coconino NF and 3,607 acres on the Gila NF.

### **Alternative A**

No lands are recommended for wilderness in Alternative A. It does not contribute to meeting the regional need for additional wilderness near population centers or the addition of underrepresented landforms and ecosystem types in wilderness in the Southwestern Region. Some of the existing wilderness boundaries of Escudilla, Bear Wallow, and Mount Baldy Wilderness areas would continue to be difficult to identify on the ground.

### **Alternative B**

Alternative B includes approximately 7,074 acres of Recommended Wilderness MA as additions to Escudilla and Bear Wallow Wilderness areas. These additions would improve manageability because the wilderness boundaries would be more identifiable by the public and Forest Service employees. The addition to Escudilla Wilderness would more than double the size of the wilderness. This would supplement the existing biodiversity and naturalness of the areas and would enhance the outstanding opportunities for solitude and primitive and unconfined recreation. There is some local public support for enlarging Escudilla Wilderness.

The potential wilderness areas recommended for wilderness include most of Escudilla Wilderness Additions Southeast and Northwest (6,422 acres), most of Escudilla North (363 acres), a small portion of Hulsey (28 acres), a portion of Bear Wallow Wilderness Addition Southeast (88 acres), and all of Bear Wallow Wilderness Addition Northwest (172 acres). The Escudilla Wilderness additions are slightly smaller than the potential wilderness areas to address manageability concerns on Terry Flat and along two roads. Also, an area in the southwest corner, south of Bob Thomas Creek where the road prism of a decommissioned road is still very evident, was not recommended. The additions to Escudilla Wilderness would extend the north, east, and south wilderness boundary to identifiable features on the ground, including Forest Road (FR) 275. The only portions of Bear Wallow Wilderness Addition Southeast included in Alternative B are two small parcels between the southeastern wilderness boundary and FR 54; these additions would improve manageability.

This recommendation could increase the wilderness acreage on the Apache-Sitgreaves NFs and would improve boundary recognition of two wilderness areas. It would contribute to meeting regional needs because the lands contain seven ecosystems that are underrepresented in wilderness in the Southwestern Region. (Information on underrepresented landforms and ecosystems can be found in the Wilderness Evaluation Reports in the Plan Set of Documents.) Alternative B would address public desire for more wilderness by recommending 7,074 acres for inclusion in the National Wilderness Preservation System.

This recommendation includes about 380 acres that would require additional action before designation, including decommissioning 2.3 miles of engineered timber sale roads and reducing signs of past timber treatments (approximately 278 acres).

Additional potential wilderness areas are not recommended for wilderness under Alternative B because of the need to use mechanical treatments to restore ecosystems and reduce divergence of the forests' PNVTs from desired conditions and to provide forest products for local and regional industry and personal use. Additional wilderness is also not recommended to allow for the mix of recreation opportunities that Alternative B proposes.

Most of the areas identified as potential wilderness, but not recommended for wilderness, would be managed under Natural Landscape MA direction, which would help maintain wilderness characteristics. Areas not in the Natural Landscape MA and within IRAs would be managed consistent with the 2001 Roadless Area Conservation Rule (Roadless Rule), which would help maintain roadless characteristics.

### **Alternative C**

Alternative C includes approximately 6,982 acres of Recommended Wilderness MA as an addition to Escudilla Wilderness. This addition would improve manageability because the wilderness boundary would be more identifiable by the public and Forest Service employees. The addition to Escudilla Wilderness would more than double the size of the wilderness. This would supplement the existing biodiversity and naturalness of the area and would enhance the outstanding opportunities for solitude and primitive and unconfined recreation. There is some local public support for enlarging Escudilla Wilderness.

The potential wilderness areas recommended for wilderness include Escudilla Wilderness Additions Southeast and Northwest (6,663 acres), a portion of Escudilla North (291 acres), and a small portion of Hulsey (28 acres). The Escudilla Wilderness Additions are slightly smaller than the potential wilderness areas because an area in the southwest corner, south of Bob Thomas Creek where the road prism of a decommissioned road is still very evident, was not recommended. The additions to Escudilla Wilderness would extend the north, east, and south wilderness boundary to identifiable features on the ground, including FR 275.

This recommendation could increase the wilderness acreage on the Apache-Sitgreaves NFs, would improve boundary recognition of one wilderness area. It would contribute to meeting regional needs because the lands contain six ecosystems that are underrepresented in wilderness in the Southwestern Region.

This recommendation would include about 320 acres that would require additional action before designation, including decommissioning 1.2 miles of engineered timber sale roads and reducing signs of past timber treatments (approximately 270 acres).

Additional potential wilderness areas are not recommended for wilderness under Alternative C because of the alternative emphasis on providing forest products for local and regional industry and personal use. To accomplish this, mechanical treatments are the primary method to restore ecosystems and reduce divergence of the forests' PNVTs from desired conditions. Additional wilderness is also not recommended to allow for the Alternative C emphasis on motorized and developed recreation opportunities.

Several areas identified as potential wilderness, but not recommended for wilderness, would be managed under Natural Landscape MA direction, which would help maintain the wilderness characteristics. Other areas would be managed according to management area or special area direction, which may or may not maintain wilderness characteristics. The additions to Bear Wallow Wilderness were not included in this alternative to reflect public concerns.

## **Alternative D**

Alternative D includes approximately 491,300 acres of Recommended Wilderness MA. This includes almost all the potential wilderness areas; it does not include the Phelps Cabin Research Natural Area, because it already has a special designation. Alternative D includes additions to all three wilderness areas on the forests. These wilderness additions would improve manageability because the wilderness boundaries would be more identifiable by the public and Forest Service employees. The wilderness additions would supplement the existing biodiversity and naturalness and would enhance the outstanding opportunities for solitude and primitive and unconfined recreation found the three wilderness areas. This alternative responds to local and regional support for additional wilderness on the Apache-Sitgreaves NFs.

An additional 2,981 acres on the Coconino NF and 3,607 acres on the Gila NF are recommended for wilderness (the Apache-Sitgreaves NFs took the lead on evaluating and recommending these areas because they are contiguous to larger recommended areas on the forests). Boundary recognition of Escudilla and Bear Wallow Wilderness areas would be improved as described under Alternative B. Identification of the Mount Baldy Wilderness boundary would be improved, as much of the east boundary would be near State Highway 273.

This recommendation would increase wilderness acreages on the Apache-Sitgreaves NFs, improve boundary recognition for three wilderness areas, and contribute to meeting the regional need for additional wilderness because of the proximity of several recommended areas in the western and southern portions of the forests to the population centers of Flagstaff, Phoenix, and Tucson. The recommended wilderness would add lands containing three underrepresented landforms and ten underrepresented ecosystems to the wilderness system in the Southwestern Region.

This recommendation includes about 8,471 acres in the Escudilla Mountain area that would require additional action before designation, including decommissioning 36.4 miles of engineered timber sale roads and reducing signs of past timber treatments (approximately 3,300 acres).

Alternative D's emphasis on fire as the primary treatment to restore ecosystems and reduce divergence of the forests' PNVTs from desired conditions is compatible with this wilderness recommendation. The additional recommended wilderness supports the Alternative D emphasis on nonmotorized and dispersed recreation opportunities.

Inclusion of this alternative in the DEIS provides a range of recommended wilderness to be analyzed. The Responsible Official could choose from the areas analyzed in Alternative D to develop a new recommended wilderness alternative for the FEIS.

## **Environmental Consequences of Wilderness Recommendation**

### *Wilderness Characteristics*

Wilderness characteristics are naturalness, outstanding opportunities for solitude or primitive and unconfined recreation, and special features and values. Recommending an area with these characteristics for wilderness would protect them. The amount of recommended wilderness varies by alternative. Alternative D would protect the most wilderness characteristics, while Alternative A would protect the least. Alternatives B and C would protect slightly more than Alternative A.

Alternative D would provide the most opportunities for a wilderness experience through the increased acreage recommended for wilderness. Because of the increased opportunities for a wilderness experience under this alternative, the greatest opportunity exists to reduce pressure and crowding in wilderness. By distributing wilderness use across more wilderness areas, the ability to protect wilderness characteristics also increases. Alternative A does not propose any additional wilderness acreage and would not disperse wilderness use on the forests. Under Alternatives B and C, dispersal of wilderness use would be small because of the nominal increase in wilderness and because these alternatives do not add new stand-alone areas. However, Alternatives B and C would provide more primitive and unconfined recreation opportunities than Alternative A but much less than Alternative D.

### *Non-wilderness values*

#### *Motorized and Developed Recreation*

Recommended wilderness could affect the location and amount of future recreation developments and facilities, including motorized use areas and trails. Alternative D would provide the least opportunity for future recreation development, while Alternative A would provide the most because more land would be available for these uses. Alternatives B and C would provide slightly more opportunities than Alternative A. Also, those desiring motorized recreation opportunities would be displaced to other appropriate management areas across the forests. This may cause added pressure and increased potential for crowding in those management areas. Alternative D would have the most potential for displacement, followed by Alternatives B, C, and A, in order of displacement potential.

#### *Wildlife species/populations/management needs*

Recommended wilderness would provide greater protection for wildlife and wildlife habitats. Alternative D, with the most recommended wilderness, would provide the most protection, while Alternative A would provide the least. Alternatives B and C would provide slightly more protection than Alternative A.

#### *Water availability and use*

There would be no effects to water availability and use under all alternatives.

#### *Livestock operations*

There would be no effects to livestock operations under all alternatives.

#### *Vegetation Management*

Recommended wilderness would affect the ability to mechanically treat vegetation to restore ecosystems and reduce fuel loading. The ability to use fire as a vegetation treatment would not be

restricted under all alternatives. Alternative D, with the most recommended wilderness, would place the most restrictions on where mechanical treatments may be conducted; while Alternative A would have the most lands available for mechanical treatment. Alternatives B and C would have slightly less land available than Alternative A.

#### *Minerals*

Recommended wilderness would not be withdrawn from mineral entry and leasing under Alternatives B, C, and D. Oil, gas, geothermal, and mineral development could be constrained by terms and conditions that would protect the wilderness character and provide for restoration of disturbed lands. A full range of mineral activities would be allowed under Alternative A.

#### *Cultural resources*

Recommended wilderness would protect cultural resources through restrictions on motorized vehicle use. Alternative D, with the most recommended wilderness, would protect the most cultural resources, while Alternative A would protect the least. Alternatives B and C would protect slightly more cultural resources than Alternative A.

#### *Authorized & potential land uses*

Recommended wilderness would not affect land uses currently permitted under special use authorizations. However, potential land use authorizations could be restricted or limited by recommended wilderness management. Alternative D, with the most recommended wilderness, would restrict or limit land use authorizations the most, while Alternative A would restrict them the least. Alternatives B and C would limit or restrict potential land use authorizations slightly more than Alternative A.

#### *Fire, insects & disease, non-Federal lands*

Recommended wilderness would affect how fire and insect and disease outbreaks are managed. Alternative D, with the most recommended wilderness, would place the most restrictions on responses to these events, while Alternative A would have the least amount of restrictions. Alternatives B and C would have slightly more restrictions than Alternative A.

Development of inholdings and adjacent non-Federal lands could adversely affect wilderness characteristics of recommended wilderness. There would be no effects under Alternative A because no lands are recommended for wilderness. There would also be no effects under Alternatives B and C because there are no inholdings or non-Federal lands adjacent to recommended wilderness. Recommended wilderness could be affected under Alternative D because there are numerous inholdings and adjacent parcels of non-Federal land.

#### *Social & Economics*

Alternative D would respond the most to those who desire more wilderness and the least to those who do not want additional wilderness. Alternatives B and C would also fulfill this desire for more wilderness but to a lesser extent than Alternative D. Alternative A would not meet the desire for additional wilderness, however it does respond to the segment of the public that desires no additional wilderness and favors non-wilderness uses and values, such as timber harvesting, road construction, and recreation development.

The economic effects of the alternatives are discussed in the Socioeconomic Resources Specialist Report (U.S. Forest Service 2012k). The economic impact analysis does not identify recommended wilderness as a factor that affects this resource. The major factor that changes by alternative is the amount of wood products produced. This primarily reflects the mix of treatment

methods; mechanical and fire. Alternative D emphasizes using fire across the forests, while mechanical treatments are predominant under Alternative C. Planned and unplanned ignitions are acceptable in recommended wilderness, while mechanical treatments are not.

### **Management of Areas Recommended for Wilderness**

Those areas recommended for wilderness in the plan decision would be managed under the Recommended Wilderness MA direction. The focus of this management area is to manage these areas to protect their wilderness characteristics pending legislation and designation and to provide for existing uses where compatible while protecting wilderness character. The following discussion focuses on managing under Recommended Wilderness MA direction in Alternatives B, C, and D because no areas are recommended for wilderness in Alternative A.

Under Alternatives B, C, and D, motorized travel would not be allowed. The use of motor vehicles, motorboats, and the landing of aircraft including helicopters would not be allowed, except under special circumstances as analyzed and authorized following the use of the Minimum Requirements Decision Guide. Recommendation of areas for wilderness would eliminate or restrict opportunities for motorized recreation activities and recreation facilities. Dispersed recreation that includes nonmotorized or mechanized activities (e.g., hiking, backpacking, fishing, hunting, horseback riding, mountain biking, and cross-country skiing) would be allowed. The use of mechanized equipment and chainsaws to maintain trails would be allowed.

Wilderness designation may warrant future public use restrictions by limiting visitor use and distribution including setting of group size limits to preserve an area's wilderness character. Currently, there are no restrictions on group size in areas recommended for wilderness. Wilderness designation would also prohibit the use of mechanized travel (i.e., mountain bicycles).

Recommended wilderness would be managed to provide opportunities for solitude and a primitive or unconfined type of recreation. New facilities for user comfort would not be allowed in areas recommended for wilderness under Alternatives B, C, and D.

Under Alternatives B, C, and D, mechanical vegetation treatments to achieve healthy forest conditions or wildlife, recreation, and scenic resources objectives would not be allowed in areas recommended for wilderness. Vegetation treatments that include planned (prescribed fire) and unplanned (wildfire) ignitions could occur.

Recommended wilderness may affect motorized users of nonwilderness. As the acres of recommended wilderness increase, acres suitable for future consideration of motorized recreation (roads, trails and areas) would decrease. Therefore, increasing recommended wilderness could increase pressure on nonwilderness lands that provide motorized recreation. Added pressure and subsequent crowding would also increase because of growing demand.

### **Management of Areas Not Recommended for Wilderness**

If an area is not recommended for wilderness, the forestwide and management area direction would apply to the area with wilderness potential. This direction could be modified if IRAs or eligible or suitable wild and scenic river corridors overlay a management area. Vegetation management activities associated with timber production and ecosystem restoration, as well as new road construction, are the primary activities that could alter the wilderness character of the areas. The following discussion addresses the effects to areas not recommended for wilderness.

The areas would be managed for a variety of recreation opportunities, depending on the alternative recreation theme and the motorized and recreation suitability presented in the Recreation Specialist Report (U.S. Forest Service 2012h). Many of the areas not recommended for wilderness in any alternative are found in areas of steep, rugged terrain that are not amenable to some types of travel. Mechanized and motorized equipment could be used to maintain trails and campsites and to reduce human recreational impacts (e.g., physical closures, rehabilitation activities). There would be no need to set group size limits for an area not recommended for wilderness.

Areas not recommended for wilderness could receive greater recreation use than wilderness and provide opportunities for greater alteration of the land to manage and maintain trails, scenic resources, wildlife, and forest health conditions. Future planning for areas not recommended for wilderness could result in increased opportunities for dispersed recreation facilities, as well as increased trail development opportunities for a variety of users (e.g., bicycles, ATVs).

Although timber harvest and road construction activities in many areas with wilderness potential would be unlikely under any of the alternatives because of the terrain or non-suitable timber lands, these types of activities would diminish the apparent naturalness of an area and the degree to which an area is without permanent improvements or human habitation; both principal wilderness characteristics. Mechanical disturbances would also diminish opportunities for solitude or primitive and unconfined recreation; another principal wilderness characteristic. Overall, mechanical disturbances would diminish the area's or part of an area's capability to be managed as wilderness. New road construction could eliminate an area's or part of an area's potential for wilderness designation.

#### Relationship of Short-Term Uses and Long-Term Productivity

Recommending an area for wilderness would provide short-term protection for the wilderness characteristics and resources of the area. Long-term protection would be provided only by a Congressional designation of the area as Wilderness.

### **Cumulative Environmental Consequences**

The cumulative effects analysis area includes the adjoining federally managed lands - Coconino NF, Gila NF, Tonto NF, and BLM Safford Field Office. There are no known wilderness resources adjacent to the forests on the Tonto NF or BLM lands. The Apache-Sitgreaves NFs evaluated a potential wilderness, Leonard Canyon, that extends onto the Coconino NF. There are three areas (Mother Hubbard, Nolan, and Hells Hole) that straddle the Gila NF/Apache-Sitgreaves NFs boundary. The Apache-Sitgreaves NFs has evaluated the Arizona portions of these areas and has found that each has wilderness characteristics. However, any decisions on these areas have been deferred until the New Mexico portions of these areas have been evaluated and recommendations have been made in the Gila NF plan revision process. These areas would be managed to protect their wilderness characteristics until a decision is made.

There could be an increase in lands managed to maintain and protect wilderness characteristics, should the Gila NF recommend the three areas on the Apache-Sitgreaves NFs and adjacent lands on the Gila NF for wilderness designation.

There would be no known cumulative environmental consequences to wilderness resources under all alternatives because there are no known foreseeable effects from activities on adjacent lands.

### **Adaptive Management**

Wilderness management plans are based on the most current information and are generally written to be adaptive.

Alternative D would provide more areas that would be “naturally” resilient and redundant.

### **Other Planning Efforts**

In general, there are no known wilderness management conflicts with other land use plans or policies. The amount of recommended wilderness in the preferred alternative is less than ½ of one percent of the NFS lands considered in the plan revision effort.

# Inventoried Roadless Areas

## Introduction

This report evaluates and discloses the potential environmental consequences to Inventoried Roadless Areas (IRAs) that may result with the adoption of a revised land management plan. IRAs are a Forest Service administrative designation. They can provide primitive and semi-primitive recreation opportunities and are managed to protect their roadless characteristics. This report examines four different alternatives for revising the 1987 Apache-Sitgreaves National Forests (Apache-Sitgreaves NFs) land management plan (1987 plan).

## Relevant Laws, Regulations, and Policy that Apply

36 CFR 294. 2001 Roadless Area Conservation Rule.

PL 98-406 - Designation of Escudilla and Bear Wallow Wilderness Areas. The Act also released the RARE II roadless areas in Arizona.

## Methodology and Analysis Process

The roadless area characteristics are used to evaluate the effects of the alternatives on IRAs. An IRA may or may not have all characteristics. There are nine roadless area characteristics identified in the 2001 Roadless Area Conservation Rule (2001 RACR). Roadless area characteristics are resources or features that are often present in or characterize roadless areas:

- High quality or undisturbed soil, water, and air;
- Sources of public drinking water;
- Diversity of plant and animal communities;
- Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land;
- Primitive, semi-primitive non-motorized, and semi-primitive motorized classes of dispersed recreation;
- Reference landscapes;
- Natural appearing landscapes with high scenic quality;
- Traditional cultural properties and sacred sites; and
- Other locally identified unique characteristics.

## Assumptions

In the analysis for this resource, assumptions and policies used include:

- Activities in IRAs under Alternatives A, B, and D would be consistent with the 2001 RACR to maintain their roadless characteristics.
- Wildfire is considered a natural ecological process. IRAs that burned in the 2011 Wallow Fire retain their roadless characteristics.

- Not all portions of IRAs have retained their roadless characteristics, because many areas were harvested between 1985 and 2000, after the passage of the Arizona Wilderness Act and before the initiation of the 2001 RACR. Some portions of IRAs may not be recommended for wilderness at this time.

## Revision Topics Addressed in this Analysis

Inventoried roadless areas are part of the “Managed Recreation” revision topic.

There is no indicator for Inventoried Roadless Areas.

## Summary of Alternatives

A summary of alternatives, including the key differences among alternatives, is outlined in the Draft Environmental Impact Statement. Table 6 is included here for clarification.

**Table 6. Alternative Summary for IRAs**

Alternative A	Alternative B	Alternative C	Alternative D
17 areas managed under the 2001 Roadless Area Conservation Rule		none	17 areas managed under the 2001 Roadless Area Conservation Rule

Alternatives A, B, and D include management direction for IRAs identified in the 2001 RACR. Alternative C considers management of the forests without IRAs. The preferred alternative includes direction that retains the undeveloped character of these areas. Comments received in the scoping process and between the draft and final EIS will help the Agency determine the scope of issues related to roadless area management and guide the analysis of environmental effects.

## Description of Affected Environment (Existing Condition)

### Inventoried Roadless Areas

There are 17 IRAs on the Apache-Sitgreaves NFs ( Figures 4 and 5 in Appendix B and Table 7). These areas total approximately 322,000 acres. In general, these lands include rough, broken terrain with steep-sided canyons and are located in low population areas. The forests’ IRAs are the result of Forest Service rulemaking and environmental analysis (U.S. Forest Service 2000) that was conducted in the late 1990s and early 2000s. IRAs are not a management area, but overlay a variety of management areas. There is considerable overlap between IRAs and areas with wilderness potential.

**Table 7. Inventoried Roadless Areas**

Inventoried Roadless Area	Acres	Ranger District
Leonard Canyon	3,069	Black Mesa
Chevelon Canyon	5,569	Black Mesa
Escudilla Mountain <sup>1</sup>	885	Alpine
Mother Hubbard <sup>2</sup>	2,177	Alpine
Campbell Blue	7,003	Alpine
Nolan <sup>2</sup>	6,780	Alpine
Centerfire	13,130	Alpine
Bear Wallow <sup>1</sup>	878	Alpine
Black River Canyon	11,813	Alpine
Hot Air	31,703	Clifton
Salt House <sup>1</sup>	21,842	Clifton
Painted Bluffs	43,105	Clifton
Lower San Francisco	59,308	Clifton
Pipestem	34,592	Clifton
Hells Hole	15,512	Clifton
Mitchell Peak	35,392	Clifton
Sunset	28,946	Clifton
<b>Total Acres</b>	<b>321,856</b>	

<sup>1</sup> Part or most of this IRA was designated as Wilderness in 1984, only non-wilderness acres shown.

<sup>2</sup> Adjacent IRA lands are found on the Gila NF in New Mexico. Only Apache-Sitgreaves NFs acres are shown.

Roadless areas were identified during the 1979 RARE II process, an extensive inventory of roadless areas. On the Apache-Sitgreaves NFs, the Arizona Wilderness Act of 1984 designated most, but not all, of the Escudilla Mountain and Bear Wallow IRAs as wilderness. The remaining roadless lands were released to multiple-use management until revision of the land management plan, at which time they would be re-evaluated for wilderness potential.

Because there were no roadless lands during development of the 1987 plan, there are no specific goals or objectives relating to them. Between 1985 and 2000, numerous surface-disturbing and vegetation removal activities occurred on Apache-Sitgreaves NFs lands that had previously been identified as roadless. When the roadless lands were reconsidered in the 2000 Roadless Area Conservation FEIS (U.S. Forest Service 2000), there was no additional inventory or adjustment of the original boundaries to reflect these activities. Therefore, when the forests' lands were inventoried for wilderness potential for the current forest plan revision, portions of some IRAs were found to no longer have wilderness characteristics (i.e., timber harvested, roads constructed). At this time, the Apache-Sitgreaves NFs are unable to adjust IRA boundaries to remove those portions which no longer have roadless characteristics.

## **Wallow Fire**

In May and June of 2011, the Wallow Fire burned over 438,000 acres on the Apache NF and adjoining ownerships. Fire is considered a natural ecological process. The Wallow Fire affected all or portions of the following IRAs:

- Escudilla Mountain
- Mother Hubbard
- Campbell Blue
- Centerfire
- Bear Wallow
- Black River Canyon
- Salt House

## **Environmental Consequences of Alternatives**

The land management plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Because the land management plan does not authorize or mandate any site-specific projects or activities (including ground-disturbing actions) there can be no direct effects. However, there may be implications, or longer-term environmental consequences, of managing the forests under this programmatic framework.

### **Inventoried Roadless Areas**

There would be no change to the roadless characteristics of IRAs under Alternatives A, B, and D. IRAs would be managed under the 2001 Roadless Rule and plan direction (primarily the Natural Landscape MA), which would maintain their roadless characteristics, if present.

Alternative C would consider forest management without IRAs. A majority of these lands would be part of the General Forest (286,590 acres) and Energy Corridor (40 acres) MAs. Management activities, including timber harvest, other mechanical vegetation treatments, and road construction and reconstruction, could occur in these areas which could affect their roadless characteristics. Because of the terrain in these areas, timber harvest and road construction are not anticipated, but the following consequences to roadless characteristics could happen, should management activities occur.

The remainder of the non-IRA lands would be in the Natural Landscape (31,813 acres), Recommended Wilderness (855 acres), and Recommended Research Natural Area (1,968 acres) MAs. Management area direction for these 34,666 acres would maintain the roadless characteristics, if present.

In some cases, the presence of eligible and suitable wild and scenic river corridors across these lands could provide some protection of roadless characteristics. For example, a wild river corridor would continue to provide primitive recreation opportunities, maintain high to very high scenic integrity, and protect threatened, endangered, proposed, candidate, and sensitive species habitats. Also, the presence of a river corridor may restrict some activities (see Wild and Scenic Rivers Specialist Report, U.S. Forest Service 2012n) that could affect roadless characteristics.

#### *Soil/Watersheds/Air*

Under Alternative C, there could be greater effects to air, soil, and watershed resources (as described in the Air, Soil, and Watershed Specialist Report, U.S. Forest Service 2012a) because this alternative proposes the highest amounts of mechanical vegetation treatments and associated road use and emphasizes motorized recreation. Improvement of watershed conditions in these areas would be limited because they do not occur near communities or contain harvestable timber. Dust from mechanical treatments and recreation activities would potentially be greatest. Alternative C poses the most risk of soil compaction and ground cover removal.

#### *Public drinking water*

There are no municipal watersheds on the Apache-Sitgreaves NFs. However, rivers on the forests contribute to water supplies for the metropolitan areas in southern Arizona. Effects to these rivers are described above. Alternative C would have the greatest potential for increasing sediment from roads because of the higher proportion of mechanical treatments/harvest as well as an emphasis on motorized recreation opportunities (see Water Resources Specialist Report, U.S. Forest Service 2012l).

#### *Diversity of plant and animal communities*

Alternative C would have the greatest potential to fragment ecosystems, including wildlife habitats, and to introduce and spread nonnative invasive species from road construction, road reconstruction, and timber harvesting activities. As human-caused fragmentation increases, the amount of core wildlife habitat decreases. Habitat fragmentation also decreases habitat connectivity and affects wildlife movement, isolating some species and increasing the risk of local extirpations or extinctions (see Wildlife Specialist Report, U.S. Forest Service 2012m).

#### *Threatened, endangered, proposed, candidate, and sensitive species habitats and species dependent on large, undisturbed areas of land*

Threatened, endangered, proposed, candidate, and sensitive species habitats in all alternatives would be managed according to Endangered Species Act and Regional Forester directions (see Wildlife Specialist Report, U.S. Forest Service 2012m and Fisheries Specialist Report, U.S. Forest Service 2012f). No species dependent on large, undisturbed areas of land have been identified for the Apache-Sitgreaves NFs.

#### *Primitive and semi-primitive recreation opportunities*

IRAs under Alternatives A, B, and D would be managed for primitive and semi-primitive recreation opportunities, except where adjacent to roads open to highway legal vehicles (roaded natural recreation opportunities). Under Alternative C the lands would be managed for wider variety of recreation opportunities (see Recreation Specialist Report, U.S. Forest Service 2012h). Roaded natural and semi-primitive motorized recreation opportunities could increase, while primitive and semi-primitive nonmotorized recreation opportunities could decrease.

#### *Reference landscapes*

Three recommended Research Natural Areas (RNAs) in Alternative C that could serve as reference landscapes all or partially overlap the non-IRA lands. These recommended RNAs would be protected and maintained in a natural condition for the purpose of conducting non-manipulative research and for fostering education. They would be managed for non-motorized access (see Research Natural Area Specialist Report, U.S. Forest Service 2012i). So, these reference landscapes would continue to be protected in Alternative C.

#### *High scenic quality*

IRAs in Alternatives A, B, and D would be managed for high to very high scenic integrity. Under Alternative C, these lands would be managed for moderate, high, and very high scenic integrity (see Scenic Resources Specialist Report, U.S. Forest Service 2012j). Depending on location, the scenic quality of some of these lands could be reduced by management activities.

#### *Traditional cultural properties/sacred sites*

Protection of traditional cultural properties (TCPs) and sacred sites would continue under Alternative C through the elimination of cross-country motorized travel. Further protection would continue with the suitability determinations for some lands special uses and motorized uses found in Chapter 4 of the proposed plan (see American Indian Rights and Interests Specialist Report, U.S. Forest Service 2012b).

#### *Local unique characteristics*

No local unique characteristics have been identified for the IRAs.

### **Cumulative Environmental Consequences**

The cumulative effects analysis area includes the adjoining federally-managed lands, including the Coconino and Gila NFs. There would be no cumulative environmental consequences under all alternatives because the roadless characteristics of the IRAs would be maintained by terrain and limited timber harvest potential.

### **Adaptive Management**

N/A

### **Other Planning Efforts**

N/A

## References

- 36 CFR 293 - Wilderness--Primitive Areas
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## Appendix A - Wilderness Evaluation Process

The following is summarized from Forest Service Handbook 1909.12, Chapter 70. This process is used by the Forest Service to determine whether there are areas that could be recommended for wilderness designation by Congress. The process includes three steps: an inventory of potential wilderness areas, an evaluation of the potential wilderness areas, and a determination if a recommendation will be pursued for any potential wilderness.

### Inventory of Potential Wilderness Areas

The first step in the evaluation of potential wilderness is to identify and inventory all areas within National Forest System Lands that satisfy the definition of wilderness found in the 1964 Wilderness Act.

Areas identified through this process are called potential wilderness areas. This inventory of potential wilderness is not a land designation. It is completed with the express purpose of identifying all lands that meet the criteria for being evaluated for wilderness suitability and possible recommendation to Congress for wilderness designation.

The inventory of areas relies on local knowledge and judgment regarding unique, site-specific conditions of each area being considered. The boundaries of areas for the potential wilderness inventory should facilitate easy on-the-ground identification.

### Inventory Criteria

Areas qualify for inclusion in the potential wilderness inventory if they meet the statutory definition of wilderness and meet either criteria 1 and 3 or criteria 2 and 3 below.

1. Areas contain 5,000 acres or more.
2. Areas contain less than 5,000 acres, but meet one or more of the following criteria:
  - a. Can be preserved due to physical terrain and natural conditions.
  - b. Self-contained ecosystems, such as an island, that can be effectively managed as a separate unit of the National Wilderness Preservation System.
  - c. Contiguous to existing wilderness, primitive areas, Administration-endorsed wilderness, or potential wilderness in other Federal ownership, regardless of their size.
3. Areas do not contain forest roads (36 CFR 212.1) or other permanently authorized roads, except as permitted in areas east of the 100<sup>th</sup> meridian (sec. 71.12).

Areas may be included in the potential wilderness inventory even though they include the types of areas or features listed in FSH 1909.12, 71.11.

On the Apache-Sitgreaves NFs, GIS was used to identify those areas that met the inventory criteria. Site-specific information was gathered from Ranger District (District) personnel to provide background information, identify features not shown in GIS, and determine where the Region 3 criteria on roaded areas, fingers, and extrusions should be applied (R3 Potential Wilderness Inventory Process, U.S. Forest Service 2007).

## **Evaluation of Potential Wilderness Areas**

An area recommended for wilderness must meet the tests of capability, availability, and need. In addition to the inherent wilderness quality it possesses, an area must provide opportunities and experiences that are dependent upon or enhanced by a wilderness environment. The ability of the Forest Service to manage the area as wilderness is also considered.

### **Capability**

The capability of a potential wilderness is the degree to which an area contains the basic characteristics that make it suitable for wilderness recommendation without regard to its availability for or need as wilderness. The following characteristics are considered in evaluating a potential wilderness area:

1. Natural - an area is substantially free from the effects of modern civilization and generally appears to have been affected primarily by the forces of nature.
2. Undeveloped - the degree to which an area is without permanent improvements or human habitation.
3. Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation - the capability of the area to provide solitude or primitive and unconfined types of recreation. This includes a wide range of experiential opportunities. Solitude is the opportunity to experience isolation from sights, sounds, and the presence of others from developments and evidence of humans.
4. Special Features and Values - an area is capable of providing other values such as those with ecologic, geologic, scientific, educational, scenic, historical, or cultural significance.
5. Manageability - the ability to manage an area as wilderness as required by the Wilderness Act and how boundaries affect manageability of an area.

Responses to the capability questions were drafted at the Apache-Sitgreaves NFs Supervisors Office and reviewed by District personnel. Any changes were incorporated into the capability evaluation.

If an area was found to not be capable of being wilderness (a rating of Low), it was not carried forward into the Availability Evaluation.

### **Availability**

Areas determined to meet wilderness capability requirements are considered potentially available for wilderness designation. The determination of availability is conditioned by the value of and need for the wilderness resource compared to the value of and need for other resources. Other resource potential including current use and potential future use is analyzed for the various resources involved.

Constraints and encumbrances on lands may also govern the availability of lands for wilderness. The degree of Forest Service control over the surface and subsurface of the area is also considered. The Forest Service should have sufficient control to prevent development of incompatible uses that would negatively affect wilderness character and potential.

Responses to the availability questions were drafted by at the Apache-Sitgreaves NFs Supervisors Office and reviewed by District personnel. Any changes were incorporated into the availability evaluation.

### **Need**

The need for an area to be designated as wilderness is determined through an analysis on a regional basis by evaluating such factors as the geographic distribution of areas and representation of landforms and ecosystems to which it contributes to the overall National Wilderness Preservation System. This need is demonstrated through a public involvement process, including public input to the evaluation report.

A set of GIS models, information papers, and analyses were provided by the Southwestern Regional Office. This information was synthesized at the Apache-Sitgreaves NFs Supervisors Office and reviewed by District personnel. Any changes were incorporated into the need evaluation.

### **Documentation of Potential Wilderness Areas**

Draft wilderness evaluation reports were developed for each potential wilderness; each report includes summaries of the capability, availability, and need assessments. The draft reports were made available for public comment in June 2009. Public comments were incorporated and information on the potential effects of wilderness and nonwilderness recommendations was added to the final evaluation reports. The effects of nonwilderness recommendation may be split to reflect nonwilderness, lands with roadless character, or primitive area categories.

## **Appendix B - Maps**

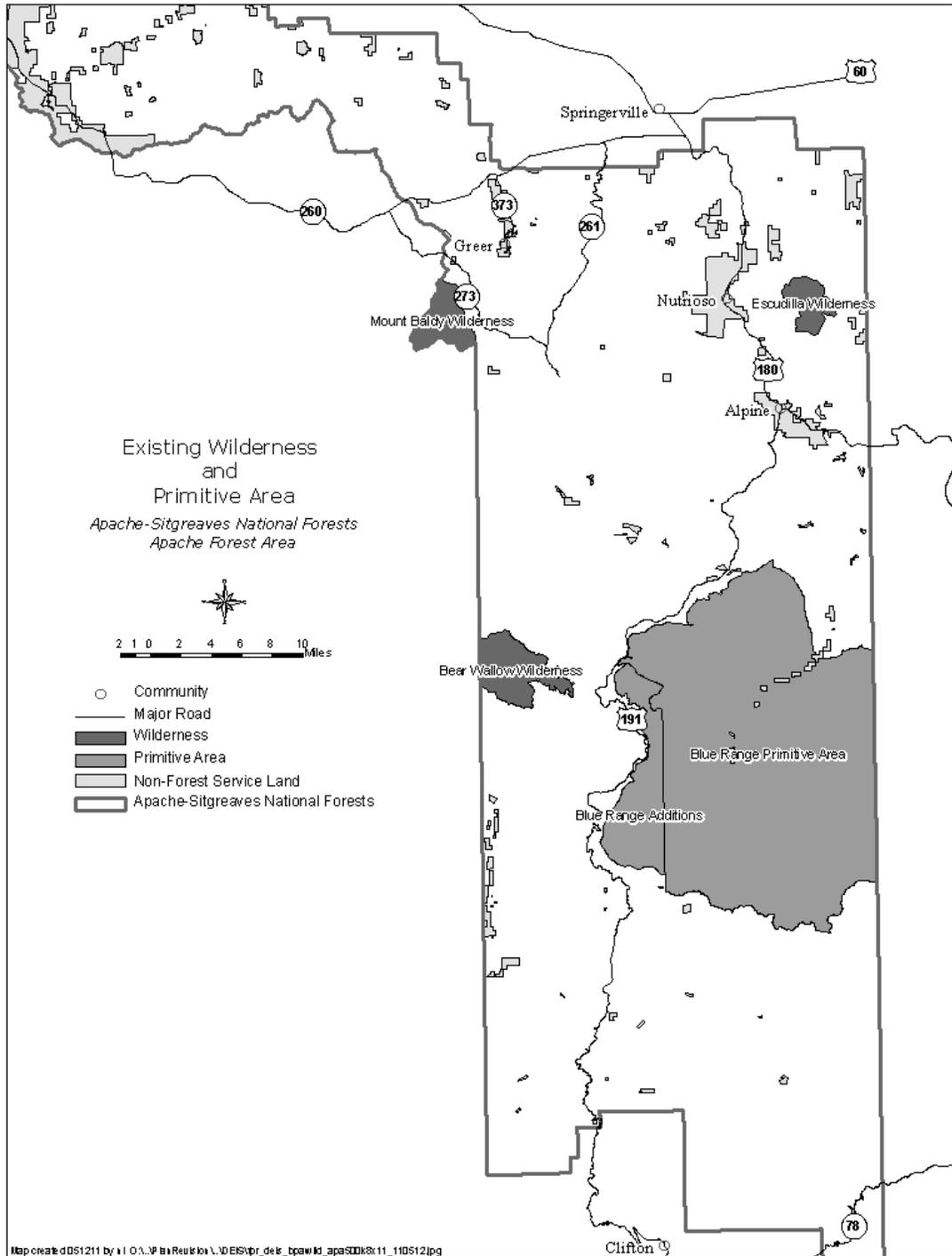
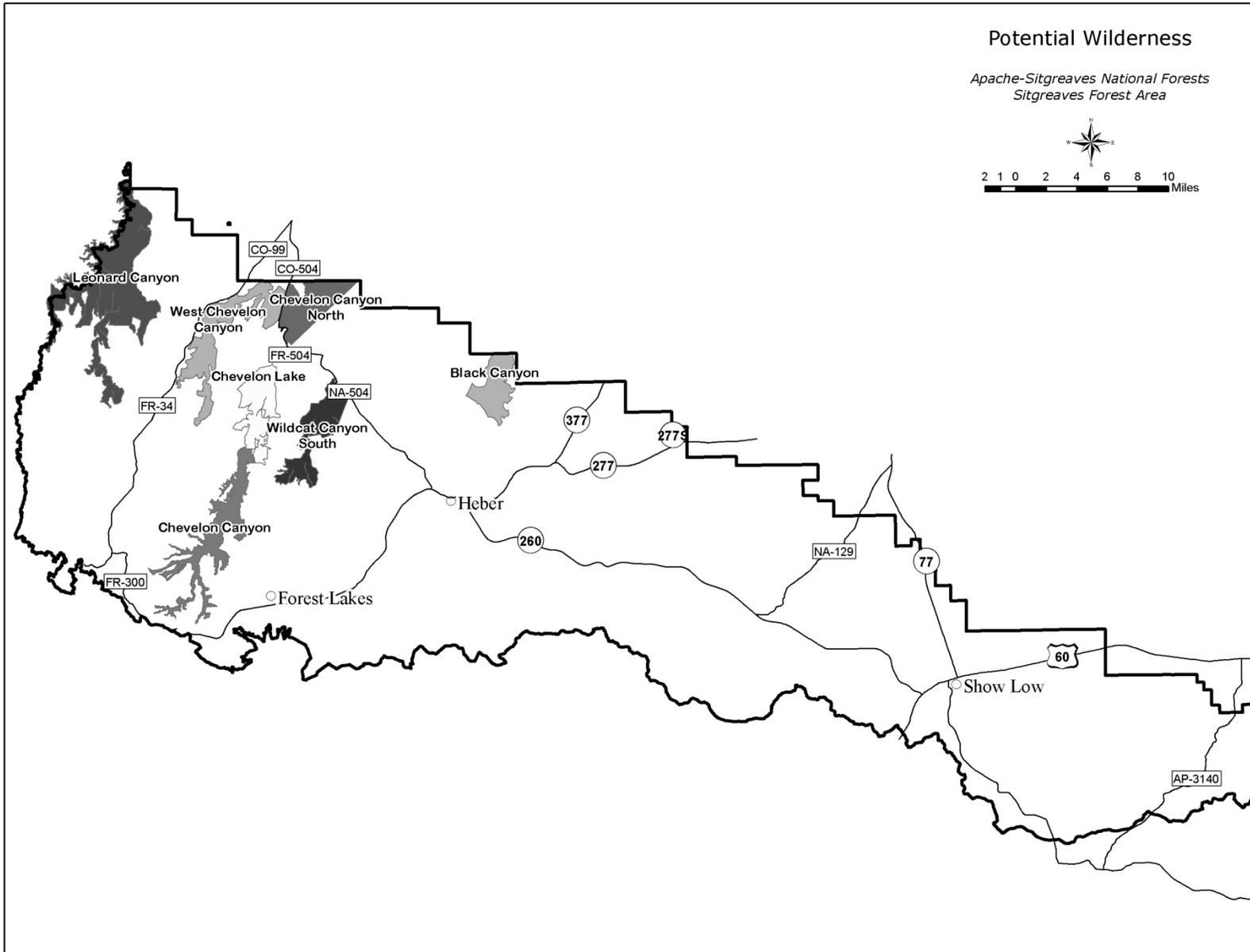


Figure 1. Map of Existing Wilderness and Primitive Area



**Figure 2. Map of Potential Wilderness - Sitgreaves NF**

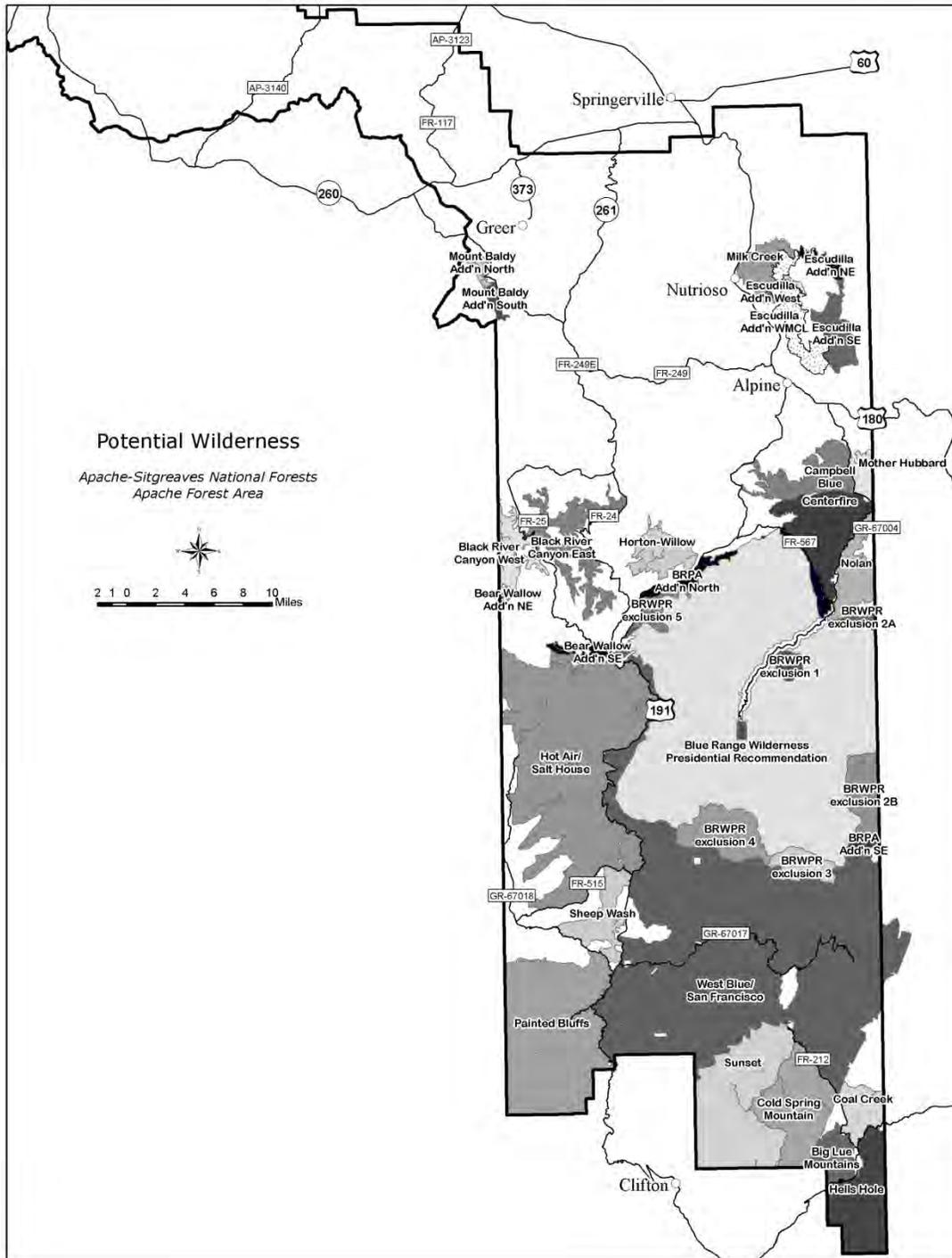
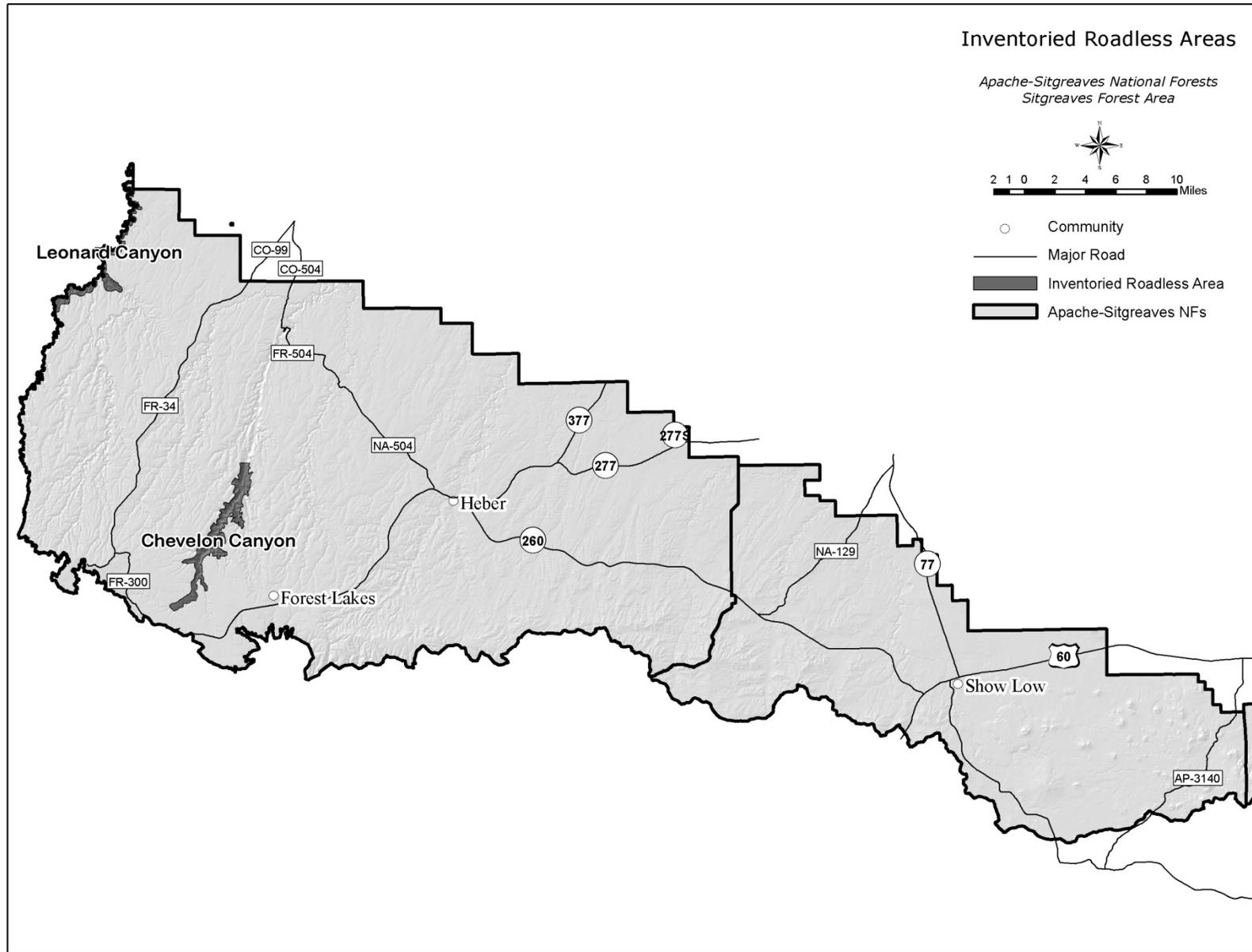


Figure 3. Map of Potential Wilderness - Apache NF



**Figure 4. Map of Inventoried Roadless Areas - Sitgreaves NF**

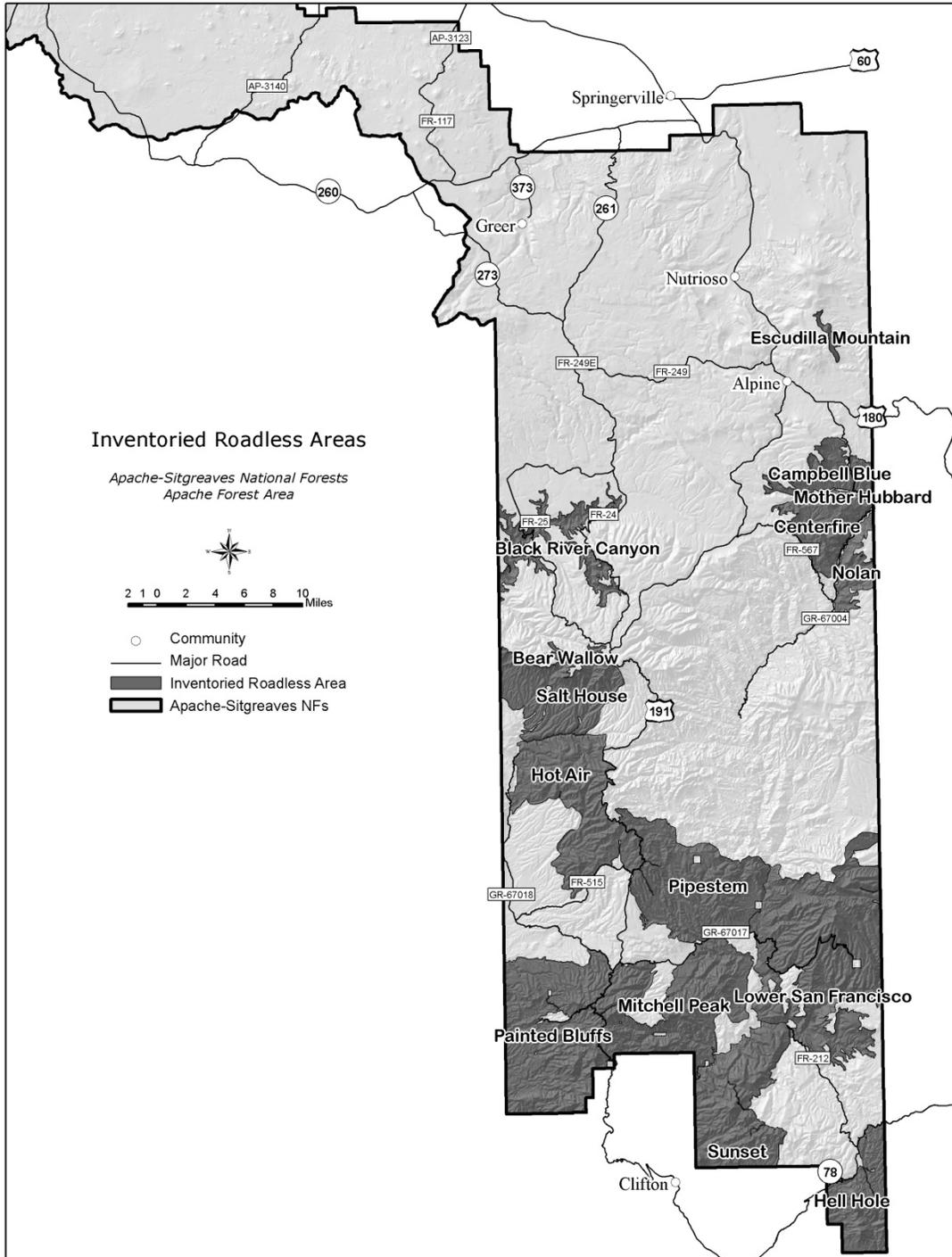


Figure 5. Map of Inventoried Roadless Areas - Apache NF

## Appendix C - Effects of Wilderness or Nonwilderness Recommendation

The general effects of wilderness or nonwilderness recommendation are shown in Table 8 below. The effects specific to each area recommended for wilderness can be found in the Potential Wilderness Evaluation Reports.

**Table 8. General Effects of Wilderness Recommendation/Designation**

	RECOMMENDATION	
	WILDERNESS	NONWILDERNESS
MANAGEMENT DIRECTION	Manage to protect and maintain wilderness characteristics	Manage for multiple use, ecosystem restoration, and social and economic values
Wilderness Characteristics	EFFECTS ON WILDERNESS RESOURCES AND VALUES	
Natural Undeveloped Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation Special Features and Values	Wilderness characteristics would be maintained and protected. The area would remain natural and generally undeveloped. Outstanding opportunities for solitude or primitive and unconfined recreation would continue to be present. Any existing special features and values would be protected.	Wilderness characteristics would be diminished by management activities. Obvious signs of activities would cause the area to be removed from potential wilderness.  OR No management activities are expected within the area. It is anticipated that the wilderness character of the area would remain indefinitely.

	RECOMMENDATION	
	WILDERNESS	NONWILDERNESS
Resource/Use	EFFECTS ON OTHER RESOURCES AND USES	
Soils	Long-term soil productivity may increase because the acreage is generally not available for management activities. Shorter-term risks to soil productivity may be increased until fire-adapted ecosystems (especially, ponderosa pine) are restored. Soil erosion risk would be reduced.	The natural functions of watersheds could be affected by activities. The threat of soil erosion from associated motorized uses and land disturbing activities would increase with the degree of use. However, mitigation would be required. Compaction from recreation uses in popular areas would likely continue. Treatments may reduce soil loss by reducing the risk of uncharacteristic wildfire.
Water Quality and Quantity	The natural functions of watershed systems would be maintained. The risk of human-caused alterations, other than fire, affecting the watershed condition would be primarily limited to localized recreation activities. There could be short-term risks to watersheds until fire-adapted ecosystems (especially, ponderosa pine) are restored. Water quality would more likely be affected by management outside of wilderness.	Water quality could be affected by management activities. However, mitigation would be required to reduce effects to water quality. Management activities could be conducted to increase water yield. Treatments may reduce sedimentation by reducing the risk of uncharacteristic wildfire.
Air Quality	There would be no direct effects to air quality specifically from wilderness designation. Wilderness designation would not preclude the use of planned or unplanned ignitions to accomplish specific resource objectives, which may result in short-term air quality impacts.	There may be some short-term direct effects to air quality from fugitive dust from product removal and smoke from slash disposal. Planned and unplanned ignitions to accomplish specific resource objectives could result in short-term air quality degradation.

	RECOMMENDATION	
	WILDERNESS	NONWILDERNESS
Wildlife Habitat	Wilderness designation would provide greater protection for wildlife and wildlife habitat. Wildlife would not be harassed by motorized uses and habitat fragmentation would be minimized. Repair and replacement of existing wildlife improvements may be allowed, but new improvements and habitat enhancements would be rare and would be authorized only to protect and improve management of the wilderness resource.	Vegetation treatments may result in a greater mosaic of habitat types and associated species diversity. Opportunities to restore and/or manipulate habitat would be available. There could be some wildlife harassment from motorized use. Fragmentation and loss of habitat from road construction may occur with increased activities.
Aquatic Restoration	Natural processes would primarily affect aquatic species and their habitat. Motorized and mechanized travel and many management activities would not be allowed. Natural events and climatic variation would influence sedimentation, riparian vegetation, and nutrient cycles. Opportunities to do riparian area restoration may be precluded. Fish stocking could be permitted to continue in areas of historic stocking.	Natural processes that affect aquatic habitats would be interrupted to a degree commensurate with activities. Motorized uses, road construction, and other land-disturbing activities may increase sedimentation and potentially adversely affect riparian habitat and nutrient cycles. However, the use of BMPs would mitigate most effects. Fish stocking would continue, where appropriate.
Vegetation	Natural ecological succession would be allowed to continue and, over time, restore ecological conditions. Levels of insect infestation and disease could reach endemic levels as ecological systems move toward their historic ranges of variability. Dispersal of nonnative invasive weeds would generally be limited to trail systems and river corridors. Plant diversity would be slow to change, but would move towards a dominance of mature trees and late successional habitats.	Natural ecological succession could be interrupted by activities associated with other resource management objectives. Incidents of insects and disease would still occur, but would be more aggressively prevented or managed through vegetation treatment practices. The ability to detect and treat infestations would be greater than in wilderness and thus infestations could be prevented or contained earlier. Plant diversity would depend on the management objectives for the area.

	RECOMMENDATION	
	WILDERNESS	NONWILDERNESS
Insects and Disease	Forest stands would be more likely to be over mature and provide areas suitable for insect and disease outbreaks. Insect or disease control would not be permitted unless necessary to prevent unacceptable damage to resources on adjacent lands or unnatural loss to the wilderness resource from exotic pests. When necessary, control measures would have the least adverse effect on wilderness.	Response to insect and disease outbreaks would be more direct and rapid. A range of control and treatment options would allow more flexibility in containing outbreaks.
Non-Native Invasive Species	Non-native invasive plant species may be treated by grubbing or with chemicals when they threaten lands outside wilderness or when they are spreading within the wilderness, provided there are no serious adverse impacts on wilderness values.	All options to address non-native invasive plants would be available, including no treatment, hand pulling, herbicides, and biological control. Motorized and mechanized equipment can be used.
Recreation	Recreation use is managed to minimize the evidence of human use and provide outstanding opportunities for solitude and primitive recreation. Only primitive, non-mechanized access and recreation activities are permitted. Only those facilities required for the safety of users and protection of wilderness resources are provided. The use of mechanized tools for trail construction and maintenance would be restricted. In many cases, wilderness designation has elevated an area's visibility to the public, increasing its popularity and recreation use. Increased use can result in increased damage to trails and other resources, as well as reduced opportunities for solitude and other wilderness values.	Activities can reduce the primitive or semi-primitive recreational character through altered recreation settings, experiences, and access. The sights and sounds of human presence are usually increased by activities. Recreationists seeking a primitive or semi-primitive experience would choose not to visit such an area. Activities may also provide greater recreational access and more motorized and mechanized recreation experiences would be available.

Appendix C - Effects of Wilderness or Nonwilderness Recommendation

	RECOMMENDATION	
	WILDERNESS	NONWILDERNESS
Visual Quality	Visual quality would be protected because ground-disturbing activities would be extremely limited. The Scenic Integrity Objective would be Very High. The long-term scenic characteristics would be representative of how the landscape would appear if relatively unaffected by human activity.	The Scenic Integrity Objective would range from Low to High. There would be a greater potential for landscapes to show obvious signs of human activities. Scenic Integrity Objectives would constrain or modify activities to mitigate adverse effects to scenic resources, especially in areas seen from major recreation facilities and Scenic Byways.
Heritage Resources	Heritage resources are already protected by law. Exclusion of ground-disturbing activities lessens threats to known and unidentified heritage resources. Fewer sites or resources may be identified.	Heritage resources are already protected by law. Project-level inventories associated with ground disturbing and other activities may increase identification of previously unknown sites or resources. Mitigation measures would be applied at the project level.
Special Use Authorizations	Structures and other developments would be limited to those actually needed for management, protection, and use of the wilderness for the purposes for which the wilderness was established.	Special use authorizations would be allowed, subject to suitability.
Range	Grazing allotments and developments would be managed under the Congressional Grazing Guidelines and allotment management plans.	Grazing allotments would continue to be managed under current allotment management plans, laws, policies, and regulations.
Forest Products	Wilderness would be removed from the suitable timber base. No timber sales or firewood cutting would be permitted. Only firewood collection incidental to recreation would be allowed.	Timber production may be allowed, subject to suitability, law, policy, and regulation. Forest products, commercial and non-commercial, could be a byproduct of the restoration treatments.

	RECOMMENDATION	
	WILDERNESS	NONWILDERNESS
Minerals	The area would be withdrawn from further mineral entry and leasing. Mineral development is possible in areas with valid existing rights. Consistent with the valid existing rights, operating plans would incorporate reasonable terms and conditions for the protection of the wilderness character, and provide for restoration as near as practicable of the disturbed lands promptly upon abandonment of operations.	These lands would be open to oil, gas, geothermal, and mineral development except where specifically withdrawn or restricted for other purposes. Although a full range of activities and methods may be allowed and employed, developments and activities would be mitigated to reduce adverse impacts to other resources.
Special Designations	Wilderness designation would increase the number and diversity of areas within the Southwestern Region and the National Wilderness Preservation System. There would be no effects to other special designations - the most restrictive management would apply.	The opportunity to recommend additional wilderness within the Southwestern Region would be foregone at this time. There would be no effects to other special designations. Any restrictions associated with other special designations could affect management activities.
Fire	Wilderness designation does not preclude the use of planned or unplanned ignitions to accomplish specific resource objectives. Mechanical treatments and timber harvest would not be allowed, which may increase the risk of uncharacteristic wildfires. Suppression actions would be guided by Minimum Impact Suppression Tactics (MIST).	The risk of uncharacteristic wildfires would be reduced because of the opportunities to treat mechanically and harvest timber. The full range of suppression tactics and management approaches would be available for use.
	SOCIAL AND ECONOMIC EFFECTS	
	Local population numbers, income, or employment would generally not be affected.	Local population numbers, income, or employment would not be affected unless major mineral activity occurs.
	Costs related to the maintenance of range facilities could increase because of limitations on methods.	There would be no increased costs associated with the construction and maintenance of range facilities.
	Timber production revenues would be foregone, if any commercial stands are suitable and harvestable.	Revenues and jobs from timber production could increase, if any commercial stands are suitable and harvestable.
	Local lifestyles would not be affected unless major mineral activity occurs.	Local lifestyles would not be affected unless major mineral activity occurs.

Appendix C - Effects of Wilderness or Nonwilderness Recommendation

	RECOMMENDATION	
	WILDERNESS	NONWILDERNESS
	Revenues associated with mineral development would be foregone, because the lands would be withdrawn from mineral entry.	Revenues could be generated, if minerals are found and developed.
	Wilderness is recognized as contributing to healthy economies and healthy lifestyles. Direct benefits are derived from primitive recreation and as a “quality-of-life” factor to attract new businesses and residents. The wilderness characteristics/values that attract visitors to the area would be maintained.	Management activities would contribute to local lifestyles and healthy economies. The wilderness characteristics/values that attract visitors to wilderness would be affected.
	Ecosystem services (natural processes such as the air and water purification functions of undisturbed lands) would be protected and maintained.	Ecosystem services could be decreased with increased activities.
	Opportunities for primitive recreation and public awareness of the values associated with wilderness, including spiritual and natural qualities, would be increased.	Opportunities for primitive recreation would decrease. Opportunities for semi-primitive and more developed recreation could increase.