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**United States Department of the Interior
Bureau of Land Management**

Utah State Office

October 1991



UTAH STATEWIDE WILDERNESS STUDY REPORT

Volume IIA -Summary Analysis of Study Area Recommendations



BLM
WILDERNESS
STUDY AREAS

REGIONAL GROUPS

SALT LAKE CITY

VERNAL

WEST-
CENTRAL

UTAH

EAST-
CENTRAL

RICHFIELD

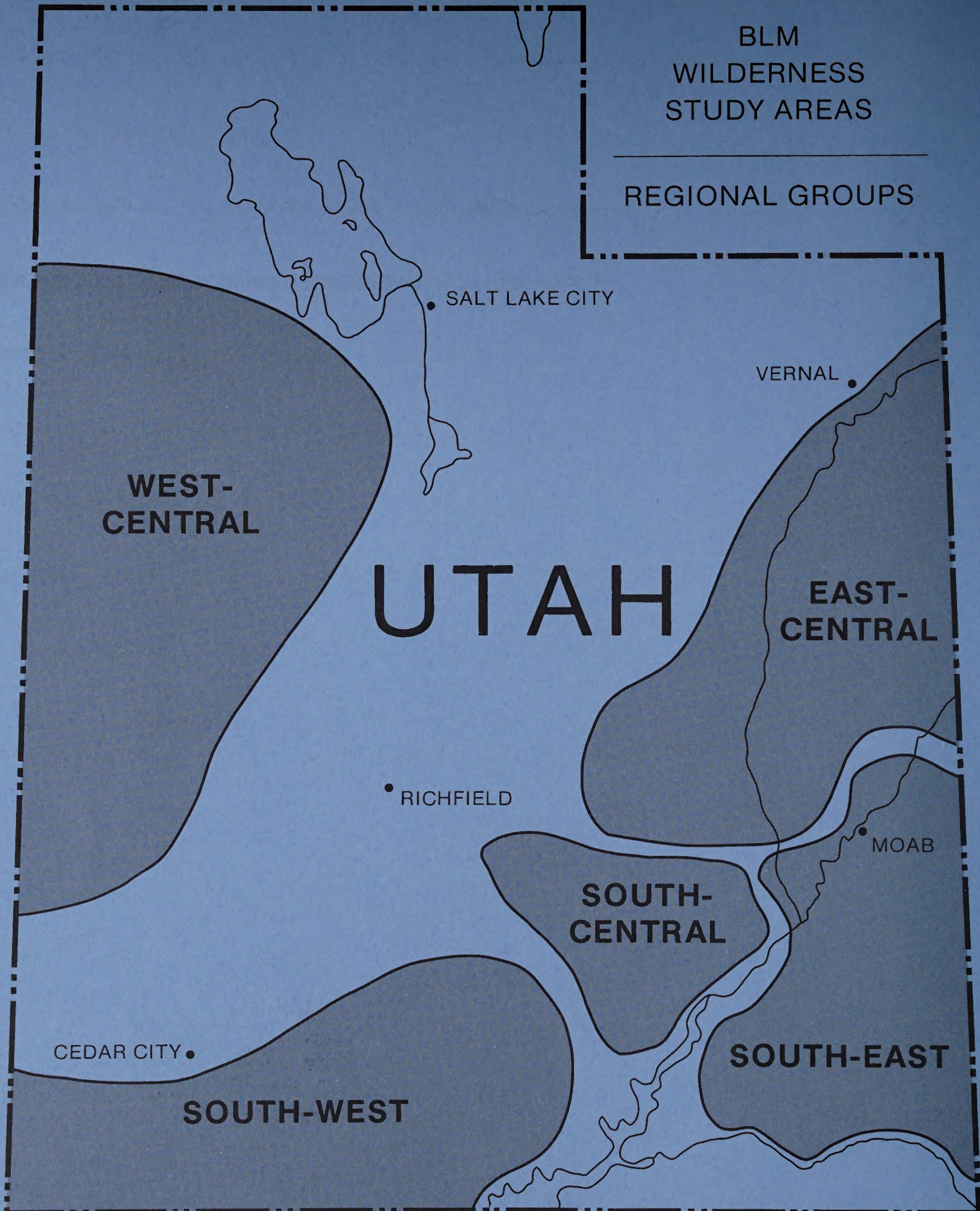
MOAB

SOUTH-
CENTRAL

CEDAR CITY

SOUTH-EAST

SOUTH-WEST



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West-Central Region

North Stansbury Mountains WSA

Cedar Mountains WSA

Deep Creek Mountains WSA

Fish Springs WSA

Rockwell WSA

Swasey Mountain WSA

Howell Peak WSA

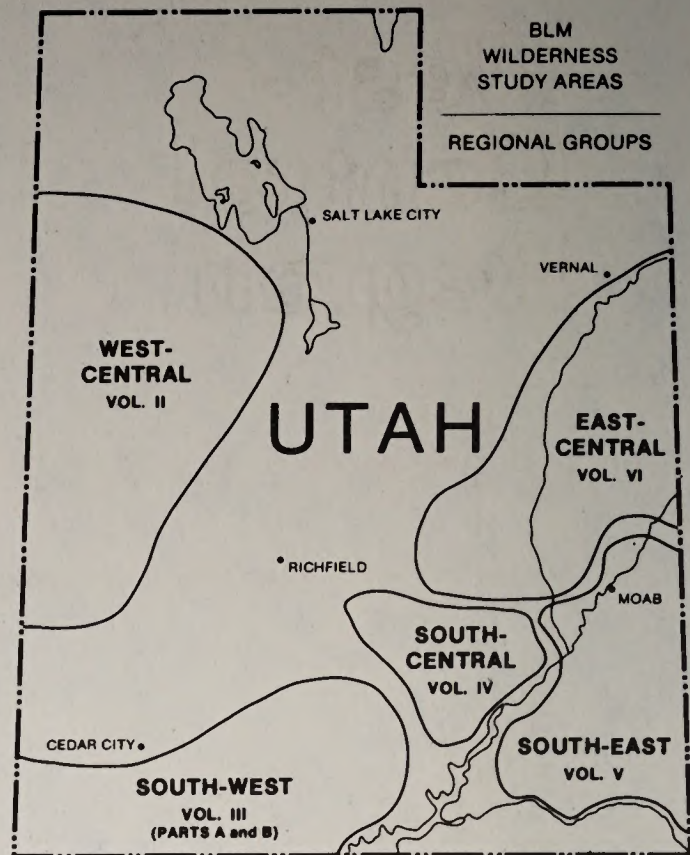
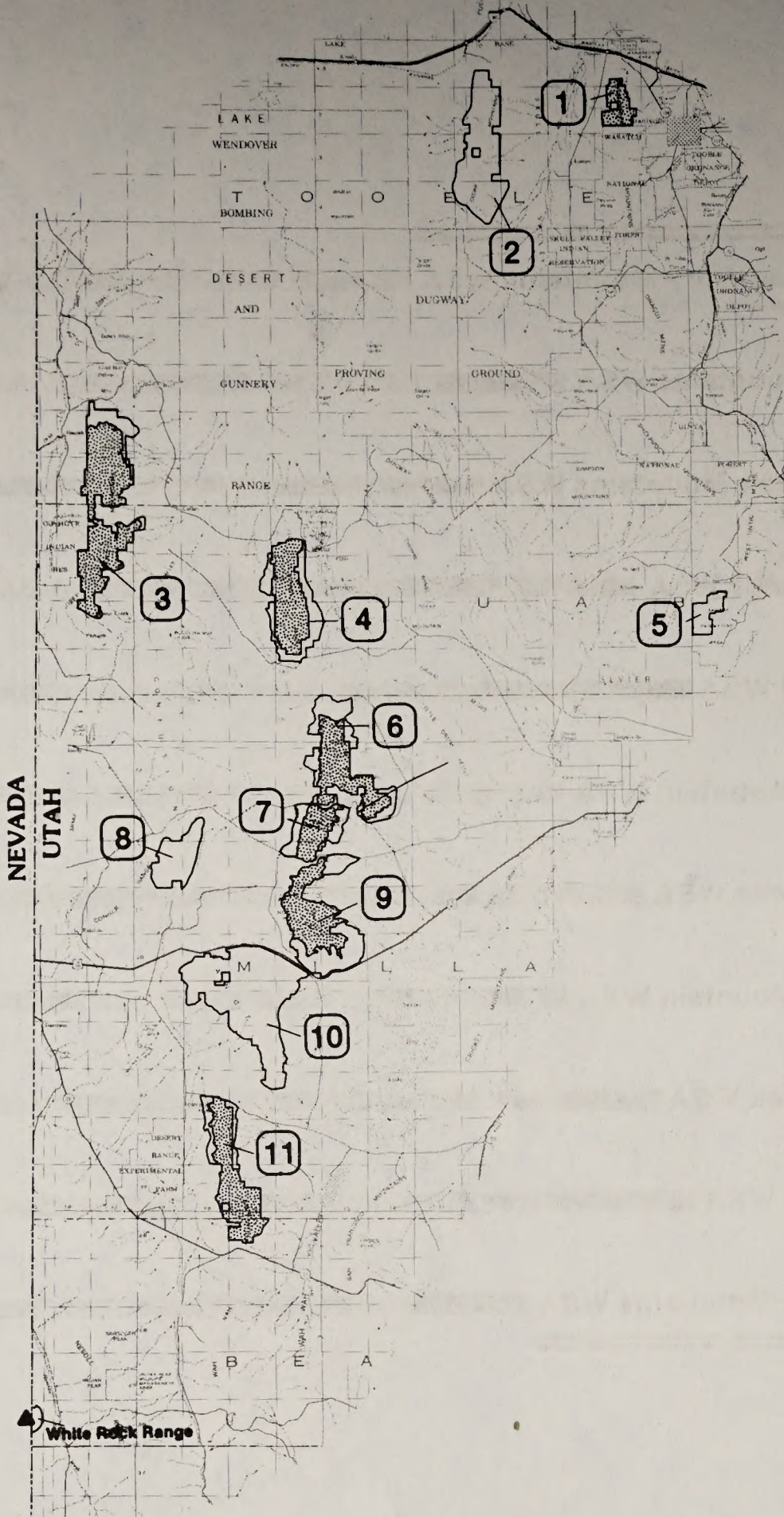
Conger Mountain WSA

Notch Peak WSA

King Top WSA

Wah Wah Mountains WSA


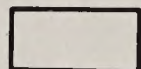

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MAP REFERENCE NUMBER/STUDY AREA

- 1 North Stansbury Mountains WSA
- 2 Cedar Mountains WSA
- 3 Deep Creek Mountains WSA
- 4 Fish Springs WSA
- 5 Rockwell WSA
- 6 Swasey Mountain WSA
- 7 Howell Peak WSA
- 8 Conger Mountain WSA
- 9 Notch Peak WSA
- 10 King Top WSA
- 11 Wah Wah Mountains WSA

BLM RECOMMENDATION

-  BLM WSAs or portions of WSAs that would be designated wilderness
-  BLM WSAs or portions of WSAs that would NOT be designated wilderness
-  BLM WSAs under study by adjacent state

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**WEST-CENTRAL REGION
LOCATION MAP**

North Stansbury Mountains WSA

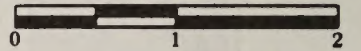


NORTH STANSBURY MOUNTAINS WSA

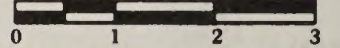
North Stansbury Mountains WSA Proposal Ut-020-089

- RECOMMENDED FOR WILDERNESS**
- NONE** **RECOMMENDED FOR NON-WILDERNESS**
- NONE** **LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS**
- NONE** **SPLIT ESTATE LAND WITHIN WSA BOUNDARY**
- NONE** **STATE LAND WITHIN WSA BOUNDARY**
- NONE** **PRIVATE LAND WITHIN WSA BOUNDARY**

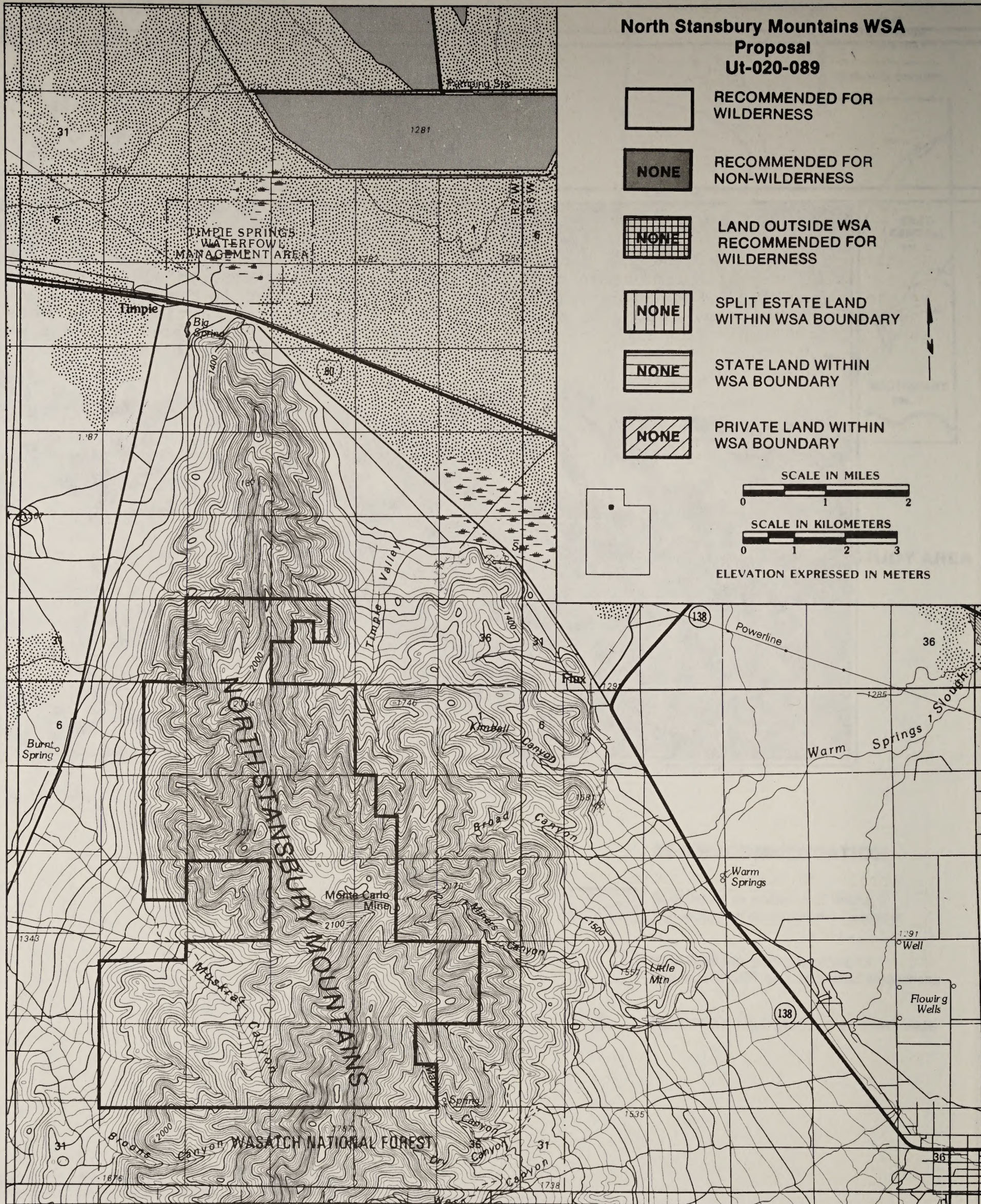
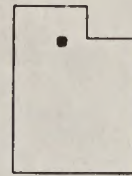
SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS



T. 1 S.

T. 2 S.

R. 7 W.

R. 6 W.

October 1991

NORTH STANSBURY MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA: 10,480 acres

The North Stansbury Mountains Wilderness Study Area (WSA) (UT-020-089) is in northeastern Tooele County, 40 miles west of Salt Lake City, Utah (population 163,697). The study area is a more or less triangular unit about 6 miles long from north to south and 3 miles from east to west. The Grantsville Unit of the Wasatch National Forest borders the WSA on the south (see Map). Interstate Highway 80 is 3 miles north of the WSA. Boundaries of the WSA are along section and subsection lines that differentiate property ownership, exclude existing developments, and enclose the more rugged portions of the northern end of the Stansbury Mountains. The WSA includes 10,480 acres of public land administered by the Bureau of Land Management (BLM). There are no private, State, or split-estate lands within the WSA (see Table 1).

Two parcels of State land and four parcels of private land are adjacent to the WSA on the east and west.

The WSA is a north-south ridge with steep, V-shaped canyons, that drops from 8,800 feet elevation at the crest of the WSA in the south to 5,200 feet along the northern base. Vegetation is predominantly juniper and conifer forests, but growth zones at different elevations provide a distinct ecological character.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and is included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this report; a partial wilderness alternative of 8,700 acres; and a no wilderness (no action) alternative.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	10,480
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	10,480
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	10,480
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	10,480
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

NORTH STANSBURY MOUNTAINS WILDERNESS STUDY AREA

2. RECOMMENDATION AND RATIONALE:

10,480 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate the entire area as wilderness. This is the environmentally preferable alternative as it would result in the least change from the natural environment over the long term.

Slightly more than 98 percent of the proposed wilderness area is natural and about 55 percent has opportunities for outstanding solitude and primitive recreation. Most of the area is too rugged for off-highway vehicular (OHV) recreation. The WSA is scenic: the rocky cliffs and dark evergreens are an "island" that contrasts sharply with the surrounding desert. From several points along the crest there are unobstructed views of the Great Salt Lake and the Great Salt Lake Desert.

The combination of vegetation zones in the WSA is found in only three other WSAs in Utah, and two of these areas include other vegetation types. Designation would add to and complement the National Wilderness Preservation System (NWPS) in the Great Basin in Utah and Nevada. The particular combination of potential vegetation types that could develop in the WSA are not likely to occur in any established wilderness area or any other BLM study area except the King Top WSA, also in Utah but not recommended for wilderness.

Wilderness designation would be consistent with decisions for the adjacent U.S. Forest Service (FS) lands, which are intended to preserve natural environmental values along the crest of the mountain range by designating and managing those lands as roadless semi-primitive, excluding vehicular use.

Conflicts with other uses are not likely. Potential for development of leasable minerals is generally low within the WSA. Wilderness designation would conflict with potential for mining of lead, silver, and gold in T. 2 S., R. 7 W., Secs. 3 and 11.

However, these minerals could be mined following designation if valid claims have been filed as of the date of designation.

Grazing use could continue as it is now, with only minor inconvenience caused by closure of a total of 2 miles of ways.

Military overflights occur, but they would create only temporary intrusions on the outstanding opportunities for solitude in the WSA.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. About 98 percent of the WSA is in an essentially natural condition. Evidence of man is not apparent within the unit, and the entire WSA meets the Wilderness Act criteria for naturalness. The difficulty of access into the WSA has helped preserve its primeval character. The WSA generally appears as an untouched rugged mountain ridge with rugged cliffs and dark evergreens.

The only intrusions are a mining road, adit, shaft, and 2 miles of ways in the lower portions of Burnt and Muskrat Canyons on the west side of the WSA. These intrusions are substantially unnoticeable. About 200 acres do not meet the Wilderness Act criteria.

B. Solitude

Visitors can find solitude in about 55 percent of the WSA (5,810 acres). Both topographic and vegetation screening exist in scattered locations. The north-south trending ridge that forms the WSA is flanked by steep slopes separated by rugged canyons that provide screening from others. Conifers on the north sides of the canyons and mixed conifers and riparian woodlands in the bottoms of the canyons provide a feeling of isolation and seclusion. Outstanding opportunities for solitude exist in the forested, rocky chutes leading into Muskrat Canyon on the slopes west of Onaqui Peak; in the canyons south of Timpie Valley and in Mack Canyon; and in places along the ridgeline where aspen, mountain mahogany, and Douglas fir provide screening.

Areas comprising about 4,670 acres (45 percent of the WSA) are conspicuously open and are not screened by vegetation or terrain. Recreationists in these areas would have little sense of seclusion if other visitors were nearby.

NORTH STANSBURY MOUNTAINS WILDERNESS STUDY AREA

The WSA is within the South Range of the U.S. Air Force (USAF) Utah Test and Training Range (UTTR), one of the busiest military air spaces in the country. At least 100 to 150 flights occur daily within the UTTR, 6 days a week, including some as low as 100 feet above the ground. Most overflights in the vicinity of the Stansbury Mountains are subsonic and usually are not directly over the WSA. The overflights cause sight and sound intrusions that detract from but do not eliminate overall opportunities for solitude.

C. Primitive and Unconfined Recreation

About 55 percent of the WSA meets the requirements for primitive recreation set by the Wilderness Act, and recreational experiences are potentially outstanding. Most current annual recreational use of about 300 visitor days is hunting and hiking along the ridgeline to the crest, at 8,800 feet, but there are significant opportunities for backpacking, horseback riding, and sightseeing.

An adventure awaits backpackers who walk the 30-mile Stansbury Range, from Timpie Ridge on the north to Johnson's Pass on the south, through the WSA and the Wasatch-Cache National Forest Desert Peak Wilderness. No trail follows the entire crest of the range. Access to the WSA is limited by adjacent private lands, but can be obtained from Muskrat Canyon on the west and FS lands on the south. Between the WSA on the north and the Desert Peak Wilderness are 3,500 acres of National Forest lands that are currently being managed as a semi-primitive nonmotorized area.

Horseback riding is possible in the central portion of the range. Riders might have some difficulty in the north along Timpie Ridge and in the south above Mack Canyon, but subalpine meadows in the north and on the south ridge above Miners Canyon are relatively gentle slopes. Miners and Muskrat Canyons provide easy travel by horseback.

The crest of the WSA provides fine panoramas. Scenic vistas on all sides include the Great Salt Lake to the north.

D. Special Features

Cougars inhabit the Stansbury Mountains. The bald eagle, an endangered species, and the golden eagle, a threatened species, inhabit the area and the peregrine falcon, also an endangered species, may be a resident.

Candidate threatened or endangered species that may live in the WSA are the ferruginous hawk, Swainson's hawk, long-billed curlew, western snowy plover, white-faced ibis, western yellow-billed cuckoo, spotted bat, and Stansbury pocket gopher. The bird species also frequent other areas throughout the Great Basin and other parts of the western United States. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness EIS for additional information.

Diversity in the National Wilderness Preservation System

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS. PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV is juniper-pinyon woodland (9,780 acres) and spruce-fir-Douglas fir (700 acres). This particular combination of PNV would probably occur elsewhere only in the King Top WSA (UT-050-070) and is not represented in the NWPS. This information is summarized in Table 2 from BLM data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah and Provo-Orem, Utah standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The North Stansbury Mountains WSA would not contribute significantly to balancing the geographic distribution of areas within the NWPS. As of January 1987, the NWPS included 23 designated wilderness areas comprising 4,868,316 acres in Utah

NORTH STANSBURY MOUNTAINS WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,153,907
Spruce-Fir-Douglas Fir Forest	0	0	1	50,862
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	249,653
Spruce-Fir-Douglas Fir Forest	0	0	1	50,862

Source: BLM File Data.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,099,962	78	2,249,195
Provo-Orem, Utah	11	721,793	80	2,776,388

Source: BLM File Data.

and the nearest adjacent states, Idaho and Nevada.

Nine designated wilderness areas are within 100 miles of the WSA. All are in National Forests. In a clockwise direction, beginning to the north, are the 23,850-acre Wellsville Mountain Wilderness, the 44,350-acre Mt. Naomi Wilderness, the 16,000-acre Mt. Olympus Wilderness, the 456,705-acre High Uintas Wilderness, the 11,334-acre Twin Peaks Wilderness, the 30,088-acre Lone Peak Wilderness, the 10,750-acre Mt. Timpanogos Wilderness, the 28,000-acre Mt. Nebo Wilderness, and; just south of the WSA; the 25,500-acre Desert Peak Wilderness.

In Utah and the adjacent states nearest the WSA (Nevada and Idaho), there are 23 wilderness areas that comprise 4,868,316 acres, but in the Great Basin there are only six wilderness areas totaling 272,994 acres. The WSA would add a PNV combination which is not represented at all in the NWPS.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

Overall, the WSA could be managed as wilderness. Because there are no State or private lands in the WSA, access and exchange or purchase would not have to be considered. Any activities or development on two sections of adjacent State land west and east of the WSA and on three parcels of private land to the east could reduce the quality of solitude in adjoining parts of the WSA but would not significantly affect wilderness qualities overall.

Five pre-FLPMA mining claims (100 acres) are in the WSA. Any mineral-related activity that might occur would have to be conducted under the unnecessary and undue degradation guidelines of the 43 CFR 3809 regulations, including reclamation of disturbance. Temporary roads and use of motorized equipment would have to be allowed if there are no reasonable alternatives. Only 2 acres of surface disturbance are projected in the

NORTH STANSBURY MOUNTAINS WILDERNESS STUDY AREA

WSA in the foreseeable future if it is designated as wilderness. There would be temporary reductions in the quality of opportunities for solitude and primitive recreation on about 14 percent (1,500 acres) of the WSA. However, mining and mineral exploration would be restricted to mining claims valid at the time of wilderness designation.

No plans are known for any kind of non-mineral-related activity in the WSA. Any proposals for use of the area if designated as wilderness, however, would be subject to wilderness management regulations, including closure to OHV use and restrictions to meet visual resource management objectives. Wilderness management could not allow rangeland developments that might disturb wilderness values, but continued livestock grazing would be consistent with wilderness management guidelines.

The USAF has stated that military flights will continue in the vicinity of the WSA, whether or not it is designated. Overflights would detract from solitude, and management could not mitigate such disturbance. This conflict could be resolved only on a congressional level.

Energy and Mineral Resource Values

The WSA could contain deposits of lead, silver, zinc, and copper that are currently listed as strategic and critical material.

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the North Stansbury Mountains WSA (USGS Bulletin 1745-B, Michael P. Foose, et al., 1989). The report indicates that the likelihood of oil and gas resources in the WSA is low with little certainty that these resources do or do not exist. It is possible, however, that some hydrocarbons may have accumulated in some of the younger rocks along the western edge of the study area. The potential for undiscovered geothermal resources is moderate in a small area in the southwestern portion of the WSA. The eastern and southern parts of the WSA are considered to have moderate mineral potential for undiscovered lead, zinc, silver, gold, and mercury. The remaining portions of the study area are assigned a low mineral resource potential for these metals. A small area in the southeasternmost part of the study area has inferred subeconomic resources of limestone suitable for making cement. Inferred subeconomic resources of sand and

gravel exist within Muskrat Canyon. These inferred subeconomic resources are not likely to be developed.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 56 inputs specifically addressing this WSA were received from 60 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 41 commenters supported wilderness designation for part or all of the WSA, while 13 were opposed. Six commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features and opportunities for solitude and primitive recreation. The majority of those commenting in favor of wilderness were from urban Utah. Of particular concern was the need to protect wildlife and wildlife habitat.

Those opposing wilderness were concerned that wilderness designation would preclude mineral exploration and development and that the WSA lacks wilderness qualities. The majority of those opposing wilderness designation were local residents and people with mining interests.

NORTH STANSBURY MOUNTAINS WILDERNESS STUDY AREA

Three Federal agencies, the FS, USAF, and USBM, commented on the Draft EIS. The FS favored a partial wilderness designation for the WSA as part of a larger wilderness area which would include the Desert Peak Wilderness Area and additional forest lands between the Wilderness and the North Stansbury Mountains WSA. The other Federal agencies did not take a position regarding designation or nondesignation of the WSA. The USAF noted that low altitude flights will continue over the WSA with or without wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level.

The USBM noted that the BLM's Final EIS should include the findings of the USGS and USBM minerals investigations and projected that those findings would be available in November 1988. Those findings were incorporated into the Final EIS and study report.

No comment letters were received on the Final EIS.

There are no State lands in-held in the WSA. In commenting on the Draft EIS the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA.

Specific comments by the State addressed vegetation, minerals, wildlife, and livestock. The State of Utah noted that the WSA has moderate wilderness values and conflicts and that the partial wilderness alternative would retain the highest quality wilderness values while minimizing problems.

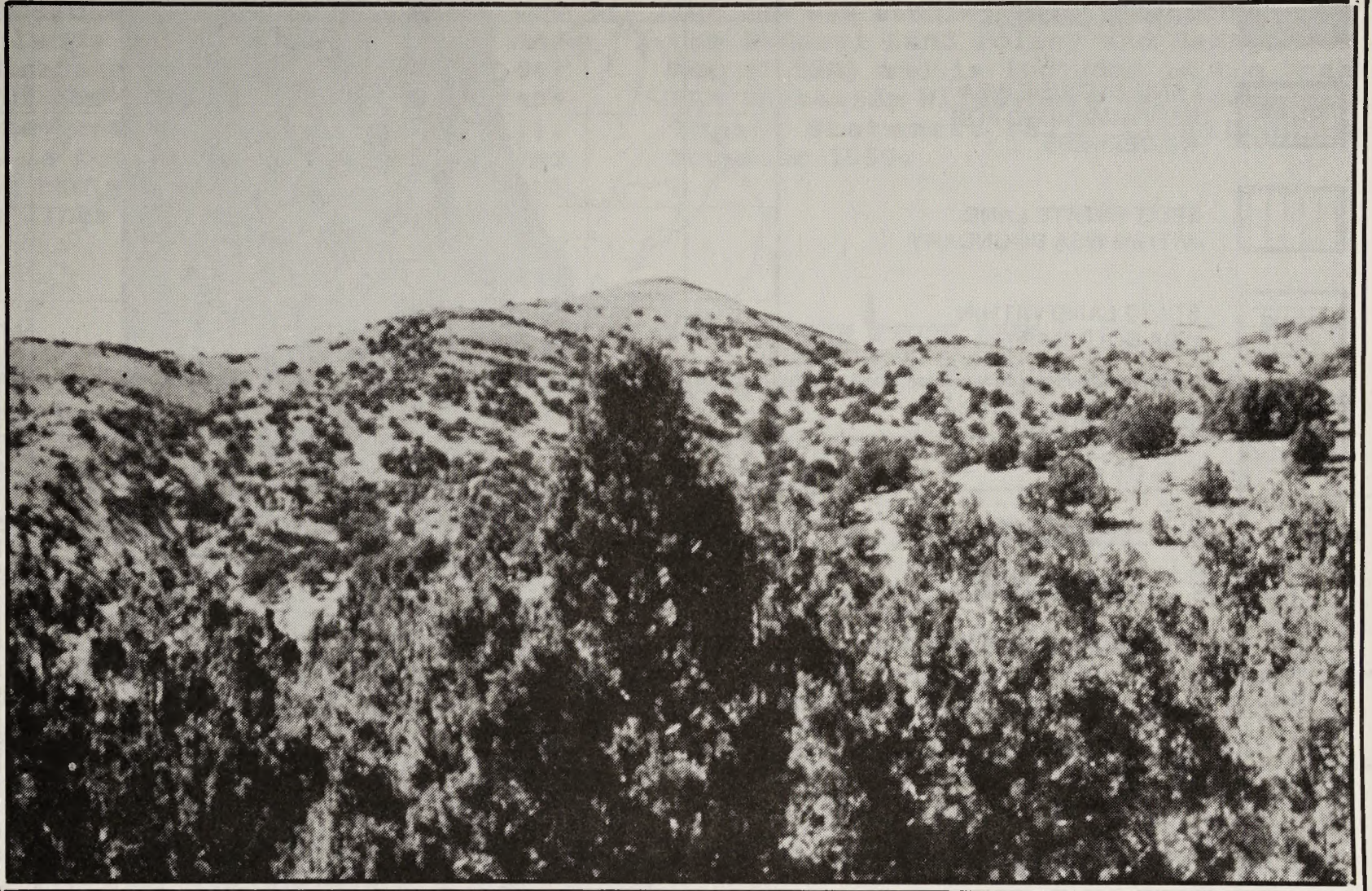
The Tooele County Master Plan, prepared by Mountain Area Planners in 1972 is not specifically directed to the North Stansbury Mountains WSA. However, the Tooele County Commission is opposed to wilderness designation for BLM lands in Utah, including the WSA. According to the Commission, wilderness designation would be in direct conflict with the Tooele County Master Plan and current zoning designations which were developed and adopted many years before any wilderness proposals were considered. Specific comments from the Commission on the Draft EIS dealt with the intrusions in the WSA and concluded that the WSA does not have real wilderness values.

NORTH STANSBURY WSA

Table 4
Comparative Summary of Impacts by Alternative

		Alternatives	
		Proposed Action All Wilderness (10,480 Acres)	Partial Wilderness (8,700 Acres)
Issue Topic		No Action/No Wilderness	
Impacts on Wilderness Values		Wilderness values would be preserved overall throughout the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 1 acre and opportunities for solitude and primitive recreation would be indirectly reduced in quality on 1,500 acres due to mineral exploration. Special features would be preserved.	Wilderness values would be preserved in the designated area which is about 83 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 2 acres and opportunities for solitude and primitive recreation would be indirectly reduced in quality on 1,500 to 3,000 acres due to mineral exploration. Special features would be preserved. Continued vehicular use of 0.25 mile of way would detract from opportunities for solitude and primitive recreation.
Impacts on Mineral and Energy Exploration and Production		Wilderness designation would eliminate or severely constrain exploration and potential production for locatable minerals. Loss of development opportunities would not be significant.	This alternative would not adversely affect mineral and energy exploration and development.
Impacts on Livestock Management		Vehicular restrictions on 2 miles of way could inconvenience six livestock operators in the area. Losses of livestock due to predators would increase slightly. The overall effect on methods and costs of livestock management would be negligible.	Effects would be approximately the same as with the All Wilderness Alternative.

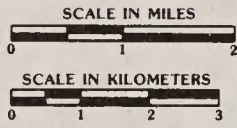
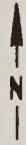
Cedar Mountains
WSA



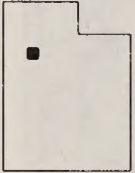
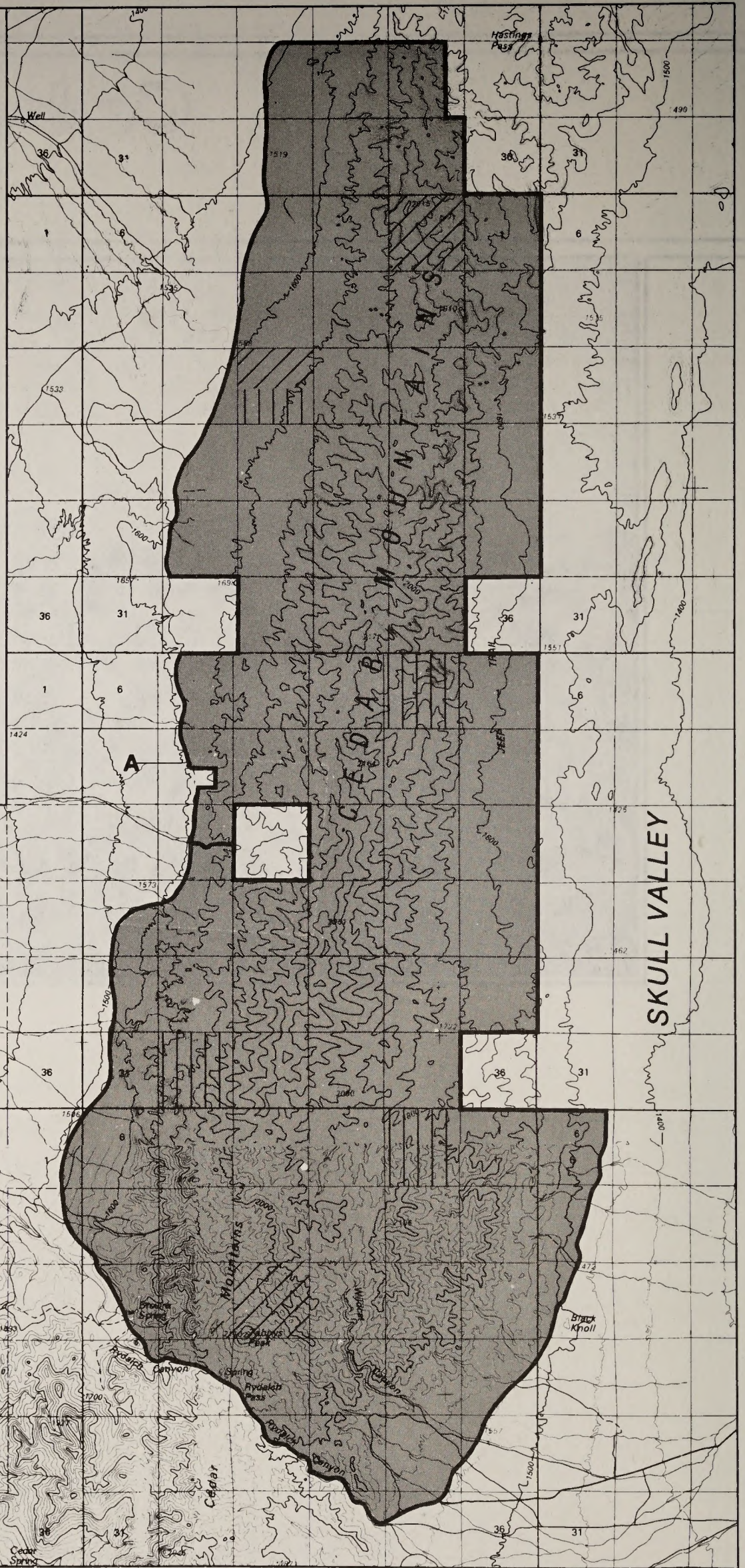
CEDAR MOUNTAINS WSA

Cedar Mountains WSA Proposal UT-020-094

- NONE RECOMMENDED FOR WILDERNESS
- RECOMMENDED FOR NON-WILDERNESS
- LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
- SPLIT ESTATE LAND WITHIN WSA BOUNDARY
- NONE STATE LAND WITHIN WSA BOUNDARY
- PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS



T. 2 S.

T. 3 S.

T. 4 S.

R. 11 W.

R. 10 W.

October 1991

CEDAR MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA: 50,500 acres

The Cedar Mountains Wilderness Study Area (WSA) (UT-020-094) is in east-central Tooele County, 65 miles west of Salt Lake City, Utah (population 163,697) and about 40 miles west of Tooele, Utah (population 14,335). The study area is an elongated unit, 20 miles long from north to south and 4 to 5 miles wide from east to west (see Map). The WSA includes 50,500 acres of full-estate public lands administered by the Bureau of Land Management (BLM), four sections (2,261 acres) of split-estate lands with Federal surface and State minerals, and four sections (1,643 acres) of non-BLM lands (private surface and State-owned minerals) (see Table 1). The WSA is bounded mainly by unimproved roads on the south and west and by legal section lines on the north and east.

The WSA is at the eastern edge of the Great Salt Lake Desert. The study area consists of a single, 20-mile long ridge trending north and south that slopes from a high point at 7,712 feet to alluvial fans at the edge of the WSA, at 4,800 to 5,000 feet. Grasses, brush, and forbs on the slopes and scattered junipers at higher elevations constitute most of the vegetation. Above 5,800 feet, the main ridge and the south-facing slopes are mostly bare, with scattered juniper trees.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and is included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	50,500
Split-Estate (BLM surface only) ^a	2,261
In-holdings (State, Private)	1,643
Total	54,404
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	50,500
Split-Estate	2,261
Total BLM land not recommended for wilderness	52,761
In-holdings (State, Private)	1,643

Source: BLM File Data

^a In this report, split-estate lands are defined as only those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface are classified according to the owner of the surface.

CEDAR MOUNTAINS WILDERNESS STUDY AREA

Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative, which is the recommendation in this report, and an all wilderness alternative of 50,500 acres.

2. RECOMMENDATION AND RATIONALE:

0 acres

(recommended for wilderness)

50,500 acres

(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The WSA is in a natural condition, but the other wilderness values of the area are not exceptional or of generally high quality. Topographically the Cedar Mountains WSA is not spectacular. The WSA does not include outstanding scenery or opportunities for primitive recreation. Because of sparse vegetation and gentle topography only a little more than 10 percent of the WSA (5,280 acres) provides outstanding opportunities for solitude. To the east of the WSA, across Skull Valley are paved roads, a rocket testing center, and five ranches. Occasionally, activities in this area create off-site activities and noises that detract from solitude within the WSA. Military training flights are conducted daily over and around the WSA, further reducing the quality of opportunities for solitude.

About 18 miles of ways enter the WSA, making the area readily accessible to vehicles. Presently, about 357 annual visitor days of recreation in the WSA are based on use of vehicles, whereas only 27 visitor days are considered to be primitive recreation. There are no water sources to add interest to the area or to attract recreational users.

Bald eagles seasonally migrate into the WSA and wild horses are occasionally seen in the area. Even though these animals would add a special feature to the WSA, they are certainly not restricted to the WSA and are found at many locations throughout the Great Basin.

The WSA has known deposits of phosphate, aragonite, and potentially saleable

columnar basalt. It is within a known copper producing province. Wilderness designation would not result in a major loss of mineral production because there appears to be little potential for development of these resources in the foreseeable future. Nevertheless, some long-term potential for mineral extraction may exist.

Although the WSA meets the minimal criteria for wilderness consideration by being natural and offering outstanding opportunities for solitude on about 10 percent of the area, the overall wilderness values of the WSA are low, and BLM recommends that the WSA be released for uses other than wilderness.

3. CRITERIA USED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable.

About 50,000 acres (99 percent of the WSA) meet the standards for naturalness, although about 75 acres have minor imprints. The remaining 500 acres do not meet the standards, as impacts caused by human activity are noticeable. These include 450 acres disturbed by 18 miles of ways and 50 acres that have been altered in five mining prospects. Approximately 3,000 acres were burned by wildfire and reseeded in 1982.

Overall, the WSA appears as untouched rounded hills with a sparse covering of juniper trees and desert shrubs.

B. Solitude

About 45,220 acres (90 percent of the WSA) do not have outstanding opportunities for solitude, as most of the WSA lacks topographic or vegetative screening and is affected by outside activities. Most slopes are gently rounded and canyons and gullies are shallow. Vegetative cover is present but generally does not provide opportunity for solitude.

The Cedar Mountains WSA is within the South Range of the U.S. Air Force (USAF) Utah Test and Training Range (UTTR), one of the busiest military air spaces in the country. Most overflights near the Cedar Mountains are subsonic and are not

CEDAR MOUNTAINS WILDERNESS STUDY AREA

directly over the WSA, but the overflights cause sight and sound intrusions that detract from opportunities for solitude. East of the WSA, paved roads, a rocket testing center, and five ranches are the sources of sounds which occasionally disturb solitude in the WSA.

The remaining 5,280 acres in the WSA have outstanding opportunities for solitude. Most of these opportunities are in canyons on the east side where vertical sedimentary formations provide some solitude among cliffs and canyons. Isolated dense stands of juniper, especially where canyons are nearby, sufficiently screen human activities and other recreationists to provide solitude.

C. Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation in the Cedar Mountains WSA are not outstanding, although a variety of recreational activities are possible.

Under the present BLM land use plan the WSA would be open to off-highway vehicle (OHV) use. A total of 18 miles of jeep trails and ways are on BLM lands within the WSA. Eleven separate access routes penetrate the WSA except on the north. Most of these access ways are in canyons near the boundary of the WSA. The longest is 3 miles in Wild Cat Canyon. An estimated 357 recreational visitor days every year are associated with vehicular use. Prior to wilderness interim management that resulted from identifying the area as a WSA, OHV groups expressed interest in using the area for organized events.

If released from wilderness study status, the area would be open for such use under the current BLM management plan.

Primitive (non-vehicular) recreational use is estimated at only 27 visitor days per year. Because of the low level of recreational use, there is presently little conflict between those who use the area for primitive rather than mechanized use. Horseback riding, hiking, geological study, and hunting are potential recreational uses. Isolated sheer limestone cliffs provide some opportunities for rock climbing. Drinking water is not available in the WSA, but a route along the crest of the ridge from White Rocks to Hastings Pass would interest hikers and horseback riders. Deer, the main big game species in the Cedar Mountains, are not plentiful and attract relatively few hunters, but upland bird hunting is sometimes good especially

along the boundary road near developed springs.

D. Special Features

Golden eagles, a BLM sensitive species, may be yearlong residents in the Cedar Mountains. Bald eagles, an endangered species, migrate through the WSA from November to March. Eight species which may inhabit or visit the WSA are potential candidate species for listing as threatened or endangered. These are the ferruginous hawk, Swainson's hawk, long-billed curlew, snowy plover, white-faced ibis, western yellow-billed cuckoo, spotted bat, and Skull Valley pocket gopher. The bird species are not unique to the Cedar Mountains, however, as they may also frequent areas throughout the Great Basin and other parts of the western United States. Refer to Appendix 4 and the Affected Environment, Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a potential natural vegetation (PNV) ecosystem not presently represented in Utah or in the NWPS. PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV is entirely juniper-pinyon woodland (50,500 acres). The PNV in the WSA is represented in the NWPS both nationally and in Utah and in BLM study areas in Utah and other states. This information is summarized in Table 2 from BLM data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah and Provo-Orem, Utah standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of these population centers.

CEDAR MOUNTAINS WILDERNESS STUDY AREA

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,103,407
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	208,933

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,099,,962	78	2,209,175
Provo-Orem, Utah	11	721,793	90	2,736,368

Source: BLM File Data.

C. Balancing the Geographic Distribution of Wilderness Areas

The Cedar Mountains WSA would not contribute significantly to balancing the geographic distribution of areas within the NWPS. As of January 1987, the NWPS included 23 designated wilderness areas comprising 4,868,316 acres in Utah and the nearest adjacent states (Idaho and Nevada).

Nine designated wilderness areas are within 100 miles of the WSA. All are in National Forests. In a clockwise direction, beginning to the north, are the 23,850-acre Wellsville Mountain Wilderness, the 44,350-acre Mt. Naomi Wilderness, the 16,000-acre Mt. Olympus Wilderness, the 11,334-acre Twin Peaks Wilderness, the 30,088-acre Lone Peak Wilderness, the 10,750-acre Mt. Timpanogos Wilderness, the 25,500-acre Desert Peak Wilderness, the 28,000-acre Mt. Nebo Wilderness, and the 113,167-acre Jarbidge Wilderness.

Although the Cedar Mountains WSA could supplement the NWPS in the Great Basin because there are only six wilderness areas totaling 272,994 acres, the WSA does not include any special or unique

features that would contribute significantly to the NWPS.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The WSA could be managed as wilderness. Provision of access to 3,904 acres of land with State subsurface rights including 1,643 acres of private surface land scattered throughout the WSA could affect wilderness values in the study area. BLM could not administratively control development of those lands. However, little or no development is projected for the in-held lands in the foreseeable future. There are no mineral leases on public lands in the WSA. There are two pre-FLPMA mining claims on public lands that could be developed even following designation. Such development is not expected.

On the other hand, the limited wilderness values, OHV use, wild horses, and sensitive species can be managed without wilderness designation. Some additional monitoring would be necessary to assure that cultural values are not lost through vandalism and inadvertent damage. Livestock grazing would continue as at present, with little or no change in management.

CEDAR MOUNTAINS WILDERNESS STUDY AREA

The USAF has stated that military flights will continue in the vicinity of the WSA, whether it is designated or not. Overflights would detract from solitude, and BLM management could not mitigate such disturbance. This conflict can be resolved only at the Congressional level.

Energy and Mineral Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area. According to BLM geologists, the WSA is not within an established oil and gas province, and there is little certainty that any deposits exist except perhaps as small, scattered pools.

Phosphate beds that underlie approximately 14,000 acres within the WSA may contain an estimated 130 million tons of recoverable phosphate. Developing this resource is not commercially feasible at this time, however. A low temperature geothermal resource may exist in the WSA, but data are insufficient to prove its potential.

A small deposit of aragonite exists in the extreme north end of the WSA, and two mining claims (40 acres) are on file for this decorative stone. An aragonite deposit just north of the WSA has been mined since the 1890s. Copper has not been found in the WSA, but the Cedar Mountains are within a known copper-producing province (Bingham [Utah]-Ely [Nevada]), and small copper deposits may be in the area. BLM assumes that gold and silver may also occur in small quantities in the WSA because the geology is similar to locations in Nevada where these resources are found.

High quality sand and gravel are in the WSA, but the same kind of material occurs widely outside the WSA boundaries. Columnar basalt on Tabby's Peak, near the southern end of the WSA, is not common in the region and may have moderate potential for sale.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 61 inputs specifically addressing this WSA were received from 65 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional input or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 45 commenters supported wilderness designation for part or all of the WSA, while 12 were opposed. Eight commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented on special features and wilderness values. The majority of those commenting in favor of wilderness were from urban Utah and other states. Of particular concern was the need to protect wildlife and wildlife habitat.

Those opposing wilderness were concerned that wilderness designation would preclude mineral exploration and development and that the WSA lacks wilderness qualities. The majority of those opposing wilderness designation were local citizens.

Two Federal agencies, the USAF and the USBM commented on the Draft EIS. The Federal agencies did not take a position regarding designation or nondesignation of the WSA. The USAF noted that low altitude flights will continue over the WSA with or without wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level. The USBM stated that BLM underrated the petroleum potential of the WSA.

CEDAR MOUNTAINS WILDERNESS STUDY AREA

No comment letters were received on the Final EIS.

There are no State surface-estate lands in-held in the WSA. There are eight sections (3,904 acres) of in-held State subsurface land. Approximately 2,261 acres of the in-held State subsurface land have Federal surface ownership and 1,643 acres have private surface ownership. In commenting on the Draft EIS the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA.

Specific comments by the State addressed errors in the EIS mapping of land status and the need to report the presence of antelope in the WSA. The State noted that the WSA meets the minimum wilderness quality factors but, lacks special features and is not as spectacular as other West Desert WSAs. In their opinion, other land use conflicts and economic and mineral potentials outweigh the wilderness values of the WSA.

The Tooele County Master Plan, prepared by Mountain Area Planners in 1972 is not specifically directed to the Cedar Mountains WSA. However, the Tooele County Commission is opposed to wilderness designation for BLM lands in Utah, including the WSA. According to the Commission wilderness designation would be in direct conflict with the Tooele County Master Plan and current zoning designations which were developed and adopted many years before any wilderness proposals were considered.

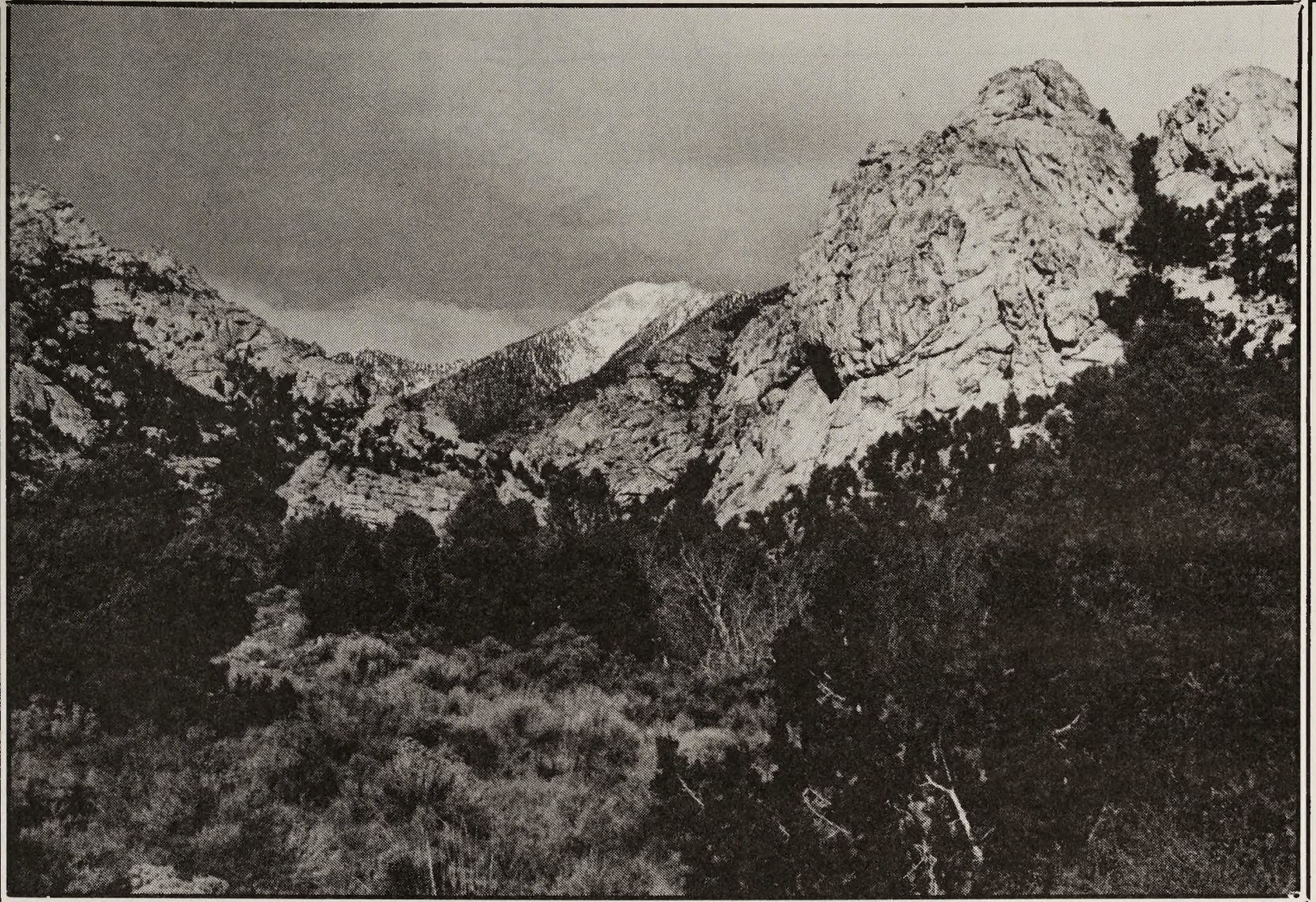
CEDAR MOUNTAINS WSA

**Table 4
Comparative Summary of Impacts by Alternatives**




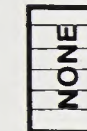


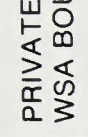
Issue Topics	Proposed Action No Action/No Wilderness	Alternatives All Wilderness (50,500 Acres)
Impacts on Wilderness Values	Wilderness values would not be protected by wilderness designation. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be reduced in quality in scattered areas as ORV use increases. Special features would not be significantly affected.	Naturalness, opportunities for solitude and primitive recreation, and special features would be preserved.
Impacts on Livestock Management	Livestock grazing would not be affected.	Restrictions on access and predator control could inconvenience livestock permittees and increase management costs and loss of sheep to predators.
Impacts on Cultural Resources	Cultural sites would be subject to inadvertent damage from ORVs and increased vandalism.	Cultural resources would receive additional protection from vandalism and inadvertent disturbance but cultural resource management may be restricted in scope and execution.
Impacts on Recreation	ORV use would increase and reduce opportunities for primitive recreation, as would development of access to private and State mineral in-holdings.	Opportunities for primitive recreation would be preserved. Opportunities for ORV use would be lost, but the loss would not be significant on a regional basis.

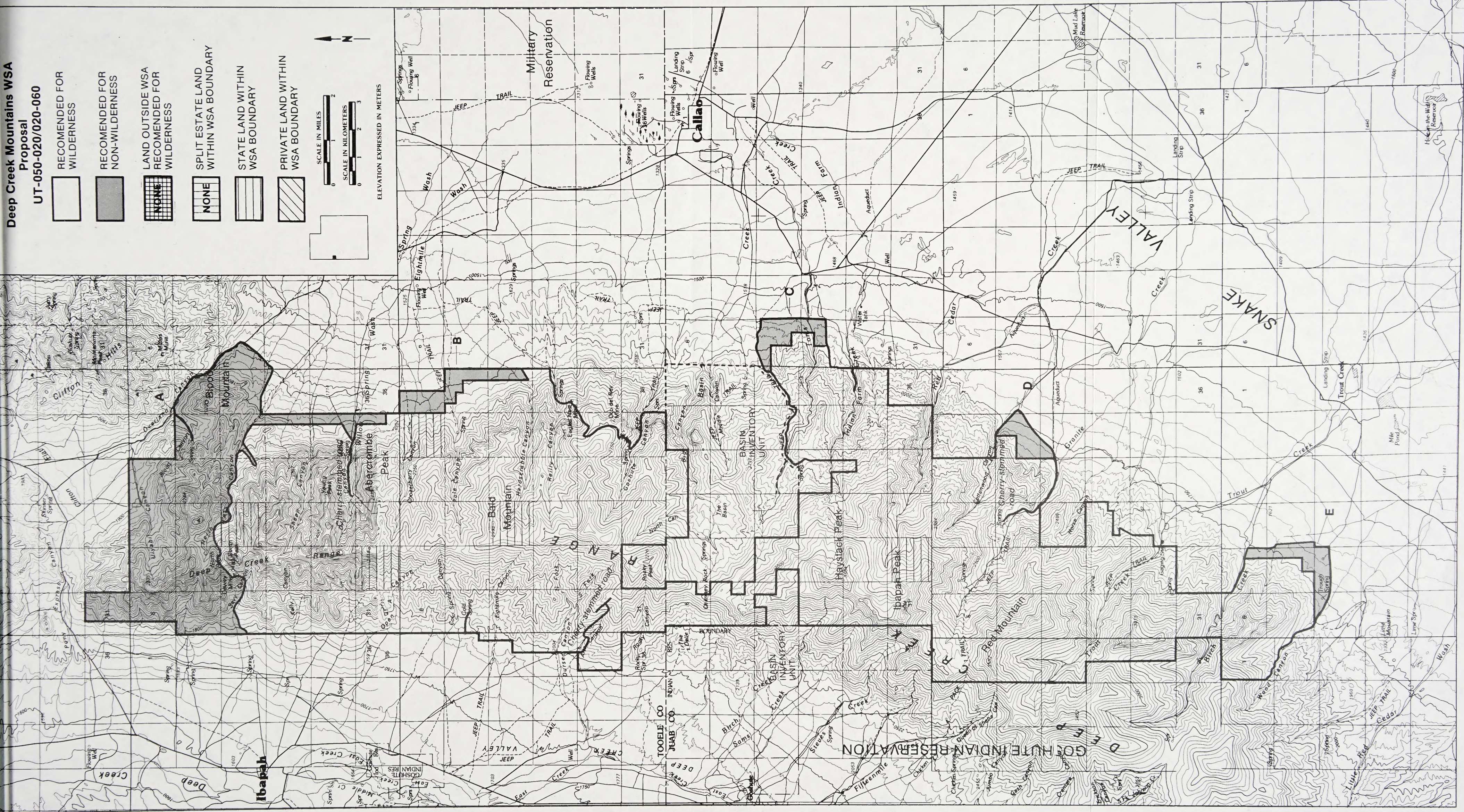
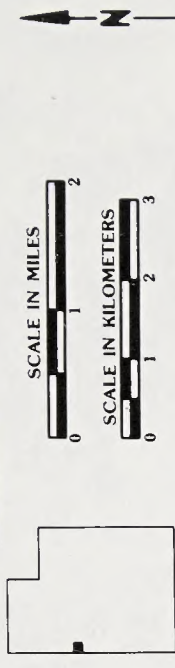
DEEP CREEK MOUNTAINS WSA

Deep Creek Mountains WSA



Deep Creek Mountains WSA
Proposal
UT-050-020/020-060

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE
-  SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  PRIVATE LAND WITHIN WSA BOUNDARY



T. 9 S.

T. 10 S.

T. 11 S.

T. 12 S.

T. 13 S.

R. 19 W.

R. 18 W.

R. 17 W.

DEEP CREEK MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA: 68,910 acres

The Deep Creek Mountains Wilderness Study Area (WSA) (UT-020-060, UT-050-020) is in southwestern Tooele County and northwestern Juab County, about 80 miles from Tooele, Utah (population 14,335) in Tooele County and 90 miles from Nephi, Utah (population 3,285) in Juab County. The WSA contains about 68,910 acres of public land administered by the Bureau of Land Management (BLM). About 38,170 acres are in Tooele County and 30,740 acres are in Juab County. The study area is about 28 miles long, north to south, and varies from 1 to 7 miles in width (see Map). The WSA includes 5 sections (3,208 acres) of in-held State lands and 40 acres of private lands, but no split-estate lands (see Table 1).

The WSA is bounded on the southwest by the Goshute Indian Reservation. Most of the boundary is along section and subsection lines which are adjacent to the edge of the mountain range. The WSA excludes most existing developments and non-Federal property adjacent to the Deep Creek Mountains. Unimproved roads define parts of the eastern and southern boundaries.

The WSA includes most of the Deep Creek Mountains, a 30-mile long north-south trending mountain range that rises from about 4,000 feet elevation on the desert floor to a ridge of 8,000 to 10,000 feet, capped by two 12,000-foot peaks. Vegetation varies with elevation from sagebrush at the lower elevations through pinyon and juniper to montane forest.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA***

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	68,910
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	3,248
Total	72,158
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	57,384
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	57,384
In-holdings (State, private)	3,248
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	11,526
Split-Estate	0
Total BLM land not recommended for wilderness	11,526
In-holdings (State, Private)	0

Source: BLM File Data

* The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

DEEP CREEK MOUNTAINS WILDERNESS STUDY AREA

White fir and bristlecone pine grow at the higher elevations. The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness, where 57,384 acres would be designated as wilderness and 11,526 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 57,384 acres
(recommended for wilderness)
- 11,526 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 57,384 acres as wilderness and to release the remaining 11,526 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts. This recommendation for wilderness will further apply to any additional in-holding acreage acquired through purchase or exchange with willing owners. The Appendix lists all in-holdings and provides information on acquisition.

All of the proposed area is natural and has outstanding opportunities for solitude and primitive recreation. Many vantage points provide panoramic views of the desert. The likelihood of mineral discovery within the area recommended for wilderness designation is less than in the surrounding area because the geologic environment is such that most mineral deposits are in the outer portions of the Deep Creek Mountains. Because potential mineral resources are not as probable in the recommended portion of the WSA, where wilderness values are high, mineral values are considered to

be of less importance than wilderness values.

Designation of a portion of the WSA would result in fewer conflicts with existing and potential uses than would designation of the entire WSA. In the portion not recommended for wilderness designation, mineral resources are known to exist and wilderness values are generally less significant than in the higher parts of the range. BLM, therefore, considers mineral values to be of greater importance than wilderness values in the portions of the WSA that are not recommended for wilderness. Most of the off-highway vehicular (OHV) recreation in the WSA, about 5,000 visitor days annually, is in the area that would not be designated. Small areas in the southeastern part of the WSA (Areas C, D, and E) lack outstanding opportunities for solitude and primitive recreation and have low scenic interest.

Designation of all or part of the WSA would add to the National Wilderness Preservation System (NWPS) in the Great Basin of Utah and Nevada by complementing the wilderness system geographically and adding an unusual combination of potential natural vegetation (PNV) types.

The basin portion of the Deep Creek Mountains was excluded from the Deep Creek Mountains WSA because it contained a large amount of private land. Since the original inventory, most of the private land was purchased by the Nature Conservancy (3,210 acres) and then exchanged with BLM for land in another area. There are still two parcels of private land (480 acres) that lie adjacent to the unit.

The acquisition of the 3,210 acres also made it logical to include another 3,780 acres in the unit for a total of 6,990 acres. The unit appears to have wilderness characteristics. The 6,990-acre area is large enough to qualify as a wilderness by itself, but because of its location, it is only logical to extend the boundary of the existing WSA to include the Basin inventory unit. BLM recommends that Congress consider addition of the Basin inventory unit for wilderness designation along with the original Deep Creek Mountains WSA.

DEEP CREEK MOUNTAINS WILDERNESS STUDY AREA

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable.

Rising from the desert floor at an elevation of 4,800 feet to peaks over 12,000 feet high, the Deep Creek Mountains are Utah's most spectacular West Desert range. The contrast between the white granite of Ibapah and Haystack peaks and the colorful talus slopes of Red Mountain make the range both scenic and geologically unique. These steep, rocky, glacially scoured peaks often hold snow well into summer. For all their ruggedness, the Deep Creek Mountains also contain alpine meadows and forested canyons.

The enormous vertical relief (greater than that of the Teton Range from Jackson Hole) creates a variety of ecological conditions that foster biological diversity unmatched in Utah's desert mountains. Eight perennial streams flow from the rough-hewn canyons, allowing deer, elk, bighorn sheep, cougar, bobcat, coyote, and other wildlife to flourish. Antelope roam in small bands along the benchlands surrounding the mountains. Due to their isolation from other similar environments, the Deep Creek Mountains also support several plant and animal species found nowhere else.

Slightly more than 98 percent of the WSA is in an essentially natural condition. The entire 68,910 acres of Federal land meet the Wilderness Act criteria for naturalness.

Altogether, mine workings and associated structures and roads comprise approximately 1,000 acres of surface disturbance within the WSA. About 15 miles of ways and jeep trails, totaling 36 acres of disturbed land, extend up several canyons into the WSA. Approximately 5 miles in the southern portion of the WSA

are now closed to use, however, in accordance with the House Range Resource Management Plan (BLM Richfield District). Total surface disturbance aggregates about 1.7 percent of the WSA. This portion is excluded from the area recommended for wilderness.

B. Solitude

Topographic and vegetation screening are excellent, and visitors can easily find seclusion in approximately 87 percent of the WSA. All of the portion recommended for wilderness would have this quality. Opportunities for solitude in the central portion of the Deep Creek Mountains are considered outstanding.

Juniper-grasslands along the lower benchlands and adjacent to the northern boundary of the WSA provide little opportunity for solitude. About 9 percent of the WSA (6,546 acres) lacks outstanding opportunities for solitude.

The Deep Creek Mountains WSA is within the South Range of the U.S. Air Force (USAF) Utah Test and Training Range (UTTR), one of the busiest military air spaces in the country. At least 100 to 150 flights are made daily, 6 days a week, including some as low as 100 feet above the ground. The areas of greatest use include the Deep Creek Mountains. Most overflights in this area are subsonic and are usually not directly over the WSA, but the overflights cause sight and sound intrusions that detract from but do not eliminate overall opportunities for solitude.

C. Primitive and Unconfined Recreation

More than 90 percent of the WSA (62,364 acres) meets the requirements for primitive recreation set by the Wilderness Act, and recreational experiences are potentially of very high quality. All of the portion recommended for wilderness would meet these standards.

Recreational opportunities include hiking, backpacking, horseback riding, fishing, hunting, nature study, and sightseeing. Availability of water enhances hiking and horseback riding activities and allows recreationists to spend more time in the WSA. Fishing could be a supplemental activity for

DEEP CREEK MOUNTAINS WILDERNESS STUDY AREA

hikers and campers. Approximately 11.5 miles of fisheries in the WSA are habitat for rainbow and cutthroat trout. Hunting is mostly for deer, cougars, and chukar partridge. Opportunities for biological and geological observations and specimen collecting are good, and opportunities for photography are rated as excellent.

The open slopes and sagebrush flats at lower elevations, comprising 6,546 acres of the WSA, do not offer outstanding opportunities for primitive recreation.

D. Special Features

The high mountain peaks are distinguishing features and exceed in elevation all but two mountains in the Great Basin.

Approximately 36 percent (24,951 acres) of the WSA are rated outstanding for visual quality.

Twelve archaeological sites were found in the WSA during inventories in 1976 and 1977. Most of the sites are open lithic scatters and rockshelters and indicate semipermanent occupancy, possibly continuously, over a range of 8,500 years, and represent cultures from Paleo-Indian to prehistoric Shoshoni. None of the sites are on or are nominated for the National Register of Historic Places.

The Utah cutthroat trout, giant stonefly, bristlecone pine, archaeological sites, and possibly the grapefern are among the special features in the WSA. In addition, the WSA has a wide variety of wildlife species, including the endangered bald eagle and peregrine falcon, six sensitive bird species, and a wide variety of flora.

Two streams in the Deep Creek Mountains are inhabited by a pure strain of Utah cutthroat trout, Salmo clarki Utah. These trout are remnants of a species that inhabited Lake Bonneville, a freshwater lake that once covered most of western Utah and part of Nevada and receded to become the Great Salt Lake. The trout is considered to be sensitive and is a candidate as an endangered species.

The giant stonefly is in most of the streams of the Deep Creek Mountains. Although abundant in streams on the Pacific Slope, the stonefly is uncommon in Utah.

The WSA is exceptional because it has representatives from several different floras. Plant species from the Pine Valley Mountains 200 miles to the south and the Utah Plateaus and Wasatch Range 100 miles to the north and east occur in the Deep Creek Mountains.

Three stands of bristlecone pine have been found in the WSA. Bristlecone pines in the Great Basin are noted for their longevity. The age of the trees in the WSA has not yet been determined, but some of the trees approach the size and appearance of trees in California's Methuselah Grove, home of the world's oldest living trees. Large stands of young bristlecone pines provide the WSA with a self-perpetuating community of significant interest. The grapefern was originally found growing above the 10,000-foot level in Indian Farm Creek Canyon in 1944. The fern has not been found since, but may still exist in the WSA. The grapefern is normally found in the northern United States and is unusual as far south as the Deep Creek Mountains. Three additional special status plant species also may occur in the WSA.

Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would add a combination of PNV ecosystems that is not presently represented in Utah or in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

DEEP CREEK MOUNTAINS WILDERNESS STUDY AREA

The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV types in the WSA are juniper-pinyon woodland (25,000 acres), western ponderosa forest (23,910 acres), Great Basin sagebrush (14,000 acres), and saltbush-greasewood (6,000 acres). Although all four PNV ecosystems are individually represented in the NWPS, only juniper-pinyon woodland is listed in the NWPS in Utah and the combination of all four is rare nationwide.

study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas:

The Deep Creek Mountains would not contribute significantly to balancing the overall central western United States geographic distribution of areas within the NWPS. It could contribute, however, to balancing the NWPS in the Great Basin of Utah and Nevada.

As of January 1987, the NWPS included 23 areas comprising 4,868,316 acres in Utah and the adjacent states of Idaho and Nevada.

The only designated wilderness area within 100 miles of the WSA is the 25,500-acre Deseret Peak Wilderness (Wasatch National Forest), to the northeast. No wilderness areas are near the WSA to the north, south, or west.

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated areas and other BLM

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,128,907
Western Ponderosa Forest	5	102,151	2	12,575
Great Basin Sagebrush	1	32,407	56	1,205,275
Saltbush-Greasewood	3	45,553	37	1,025,607
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	1	2,600	13	234,433
Western Ponderosa Forest	0	0	0	0
Great Basin Sagebrush	0	0	1	6,405
Saltbush-Greasewood	0	0	7	140,845

Source: BLM File Data.

DEEP CREEK MOUNTAINS WILDERNESS STUDY AREA

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,099,962	78	2,190,765
Provo-Orem, Utah	11	721,793	90	2,717,958
Las Vegas, Nevada	38	3,132,130	54	2,134,358

Source: BLM File Data.

In the Great Basin, there are only six designated wilderness areas totaling 272,994 acres. Only three wilderness areas in the NWPS have the same combination and diversity of PNV ecosystems as the Deep Creek Mountains, and all three are in California (see "Expanding the Diversity of Natural Ecosystems . . ."). If designated, a Deep Creek Mountains Wilderness would supplement the distribution of wilderness in the Great Basin.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness can be managed as wilderness to preserve values now present in the area. Up to 18 acres (0.03 percent of the area recommended for designation) could be disturbed by activity on valid mining claims and for access to in-held State and private lands, but approval of mining operation plans would be required and access would have to be implemented in a manner least detrimental to wilderness values.

There are no mineral leases or other valid rights in the WSA.

There are five sections of State land (3,208 acres) and one tract of private land (40 acres) within the WSA. All of the State and private land would be in the area recommended for designation. The probability of development on these lands is low in the foreseeable future. Therefore, provision of access to these lands is not expected to be a manageability problem.

The USAF has stated that low level military overflights will continue in the UTTR, including the Deep Creek Mountains, regardless of whether or not the WSA is designated as wilderness. Overflights by military aircraft, therefore, would continue, unless the USAF modifies its policies, and would be an occasional annoyance that would detract from opportunities for solitude. This conflict can be resolved only at the Congressional level.

The area not recommended for wilderness designation also could be managed as wilderness. Mineral exploration and mining activity in the northern portion of the WSA under prior rights, however, could not be denied and would require special management to assure maximum possible protection of wilderness values.

If the portion that is not recommended for wilderness designation is released for uses other than wilderness, however, these developments as well as ORV use could proceed. About 29 percent (3,320 acres) of the part of the WSA that is not recommended for wilderness designation has mining claims, compared with only 4 percent (2,280 acres) in the recommended portion. More attention to management of mineral-related activities, therefore, would be necessary in the portion of the WSA not being recommended for wilderness designation.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Deep

DEEP CREEK MOUNTAINS WILDERNESS STUDY AREA

Creek Mountains WSA (USGS Bulletin 1745-C, Michael P. Foose, et al., 1989).

According to the report, 11 areas of mineralized rock in and near the study area were evaluated by the USBM. Four of these areas contain identified resources: (1) an indicated resource of 5,000 short tons of 16.5 ounces of silver per short ton, 4.1 percent lead, 4.6 percent zinc, and 0.25 percent copper, at the Willow Springs area, which is almost surrounded by the study area in the northeast corner although it is not part of the study area; (2) an indicated gold resource of 774,000 short tons of 0.4 ounces per short ton and an inferred gold resource of 5.7 million short tons of 0.4 ounces per short ton in the Goshute Canyon area immediately east of the WSA; (3) an indicated gold resource of 75,000 short tons of 0.22 ounces per short ton in the Queen of Sheba mine just west of the study area; and (4) an inferred gold resource of 3,800 tons of 0.26 ounces per short ton in the Gold Bond area immediately east of the WSA. Gold resources at the Queen of Sheba mine and at the Gold Bond area are too low grade to warrant an economic evaluation. The small tonnage and thin vein width of the deposit at the Willow Springs area combine to make that deposit subeconomic.

Much of the WSA contains vast quantities of limestone, dolomite, and quartzite. The limestone and dolomite are suitable for agricultural uses, and the quartzite is suitable for use in the production of eighth- and ninth-quality amber glass. These commodities are not likely to be mined in the foreseeable future because the study area is so remote.

Most of the study area has moderate to high potential for undiscovered tungsten, mercury, gold, silver, lead, zinc, copper, molybdenum, tin, and (or) beryllium resources. The entire study area has low potential for undiscovered uranium, thorium, oil, gas, coal, and geothermal resources.

According to BLM geologists, there are no known deposits of oil and gas in the WSA. The WSA contains deposits of gold, silver, mercury, zinc, lead, tungsten, barite, fluorite, and beryllium. The WSA is in a recognized mineral belt (Deep

Creek-Tintic), and is in or near four mining districts. Gold, silver, lead, zinc, tungsten, and mercury have been mined within 1 mile of the Deep Creek Mountains WSA. Deposits of these metals are known to exist in the northern, western, and eastern margins of the WSA, mostly in the portion not recommended for wilderness designation. The greatest potential for finding additional deposits of metallic minerals is along the northern, western, and eastern sides of the WSA, mostly in the portion not recommended for wilderness designation.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives including designation or nondesignation of the entire area as wilderness.

Local Social and Economic Considerations

No significant effect on local economy is expected to result from wilderness designation. Mining could occur, with measures taken to mitigate impacts on wilderness values. Most mines in the vicinity of the WSA have had only small numbers of employees. Livestock grazing use could continue as it is currently, and no economic change would result from wilderness designation. Recreational use is projected to increase up to 10 times the current use over the next 30 years with a related increase in local income derived from recreation, but this projection is based mostly on population increase and may or may not be affected by wilderness designation. No social issues were identified in the study of this WSA.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 196 inputs specifically addressing this WSA were received from 308 commenters, including oral statements received at 17 public hearings on

DEEP CREEK MOUNTAINS WILDERNESS STUDY AREA

the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as an additional input or signature. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 187 commenters supported the wilderness designation for part or all of the WSA, while 114 commenters were opposed. Seven commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented particularly on the special features in the WSA. The majority of those commenting in favor of wilderness were from Utah, and about 67 percent were from urban areas in the state. Of particular concern was the need to protect wildlife and wildlife habitat.

Those opposing wilderness were concerned that wilderness designation would preclude access, is not compatible with multiple use, and that other kinds of management would be adequate and less restrictive. No particular affiliation was identified for the majority who opposed wilderness designation.

Three Federal agencies, the USAF, USBM, and National Park Service (NPS), commented on the Draft EIS for this WSA. The Federal agencies did not take a position regarding designation or non-designation of the WSA. The USAF noted that low altitude flights will continue over the WSA with or without wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level.

The USBM noted that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. These findings have been incorporated into the Final EIS and study report.

The NPS recommended that BLM identify the WSA as a proposed National Natural Landmark.

No comment letters were received on the Final EIS.

There are five State sections (3,208 acres) in the WSA. In commenting on the Draft EIS the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State noted that the Deep Creek Mountains WSA has the highest wilderness value of all the West Desert WSAs but has potential for mineral development, present and proposed water developments, and wildlife issues that would present conflicts. The State supports designation of the Deep Creek Mountains as an Outstanding Natural Area. Specific State comments on the Draft EIS dealt with proposed stream stabilization projects for endangered trout, inadequacies of the geology discussion, the age of bristlecone pine trees in the WSA, the presence of endangered plant species, and mule deer population estimates.

Tooele County and Juab County are both opposed to wilderness designation for the Deep Creek Mountains WSA.

According to the Tooele County Commission, wilderness designation would be in direct conflict with the Tooele County Master Plan and current zoning designations which were developed and adopted many years before any wilderness proposals were considered.

The Juab County Commission generally prefers that open spaces be used for many purposes on public lands.

DEEP CREEK MOUNTAINS WSA

Table 4
Comparative Summary of Impacts by Alternative

Issue Topics	Alternatives	
	Recommendation Partial Wilderness (57,384 Acres)	No Action/No Wilderness All Wilderness (68,910 Acres)
Impacts on Wilderness Values	Wilderness values would be preserved overall in the designated area which is about 80 percent of the WSA. Naturalness and opportunities for solitude and primitive recreation would be directly lost on 86 acres of the WSA, and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 13,782 acres, due to mining operations and rangeland projects. Vehicular use of 1.5 miles of ways would continue to detract from opportunities for solitude and primitive recreation. Special features would be preserved.	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 86 acres, and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 13,782 acres due to mining operations and rangeland projects. Vehicular use of about 10 miles of ways would continue to detract from opportunities for solitude and primitive recreation. Special features would not be significantly affected.
Impacts on Water Resources	Water quality or uses would not be affected because proposed and projected developments would be compatible with wilderness management or the perennial streams that headwater in the WSA.	Water quality or uses would not be affected because proposed and projected developments would be compatible with wilderness management or the perennial streams that headwater in the WSA.
Impacts on Mineral and Energy Exploration and Production	This alternative would not significantly adversely affect mineral and energy exploration and development because most of the known mineralization would be in the nondesignated area.	Exploration and development of locatable minerals would be limited and production of significant locatable minerals would be foregone. Loss of leasable mineral production would not be significant because of low probability of development.

DEEP CREEK MOUNTAINS WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topics	Alternatives		
	Recommendation Partial Wilderness (57,384 Acres)	No Action/No Wilderness	All Wilderness (68,910 Acres)
Impacts on Wildlife Habitat and Populations	Effects would be the same as for the No Action/No Wilderness Alternative.	Less than 1 percent (86 acres) of wildlife habitat in the WSA would be affected. Wildlife populations would not be significantly reduced.	Wildlife habitat would be lost on less than 1 percent (36 acres) of the WSA. Populations would not be significantly reduced. Big game and other species would be protected.
Impacts on Livestock Management	Livestock grazing would be about the same as for the All Wilderness Alternative because 82 percent of the forage, 0.50 mile of the existing ways, and all 17 permittees would be affected.	Livestock grazing would not be affected.	Changes in livestock management would inconvenience 17 livestock permittees. There would be a slight increase in predation on livestock.
Impacts on Recreation	The quality of primitive recreation would be protected in the designated area. Future recreational use would be mostly primitive in nature. Recreation use may initially decrease but would eventually increase above existing levels.	The quality of primitive recreation would not be protected. Both primitive and motorized recreation use would increase.	The quality of primitive recreation would be protected throughout the WSA. Vehicular use would be eliminated. Overall, recreational use may initially decrease but would eventually increase above existing levels.
Impacts on Economic Conditions	Local and regional economic conditions would not be significantly affected. Recreation-related expenditures would contribute to the local economy.	Local and regional economic conditions would not be significantly affected. Recreation-related expenditures would contribute to the local economy.	Wilderness designation would not significantly affect local economic conditions because significant changes are not expected in population, employment, and income. Recreation-related expenditures would contribute to the local economy.

DEEP CREEK MOUNTAINS WILDERNESS STUDY AREA

Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 9 S., R. 18 W., Sec. 16	640.00		State	No	Exchange		\$2,000
T. 9 S., R. 18 W., Sec. 32	640.00		State	No	Exchange		\$2,000
T. 10 S., T. 18 W., Sec. 2	647.80		State	No	Exchange		\$2,000
T. 10 S., R. 18 W., Sec. 16	640.00		State	No	Exchange		\$2,000
T. 11 S., R. 18 W., Sec. 32	640.00		State	No	Exchange		\$2,000
T. 11 S., R. 18 W., Sec. 21	40.00		Private	No	Purchase	\$2,400 to \$3,200	\$1,000

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

Fish Springs
WSA



FISH SPRINGS WSA

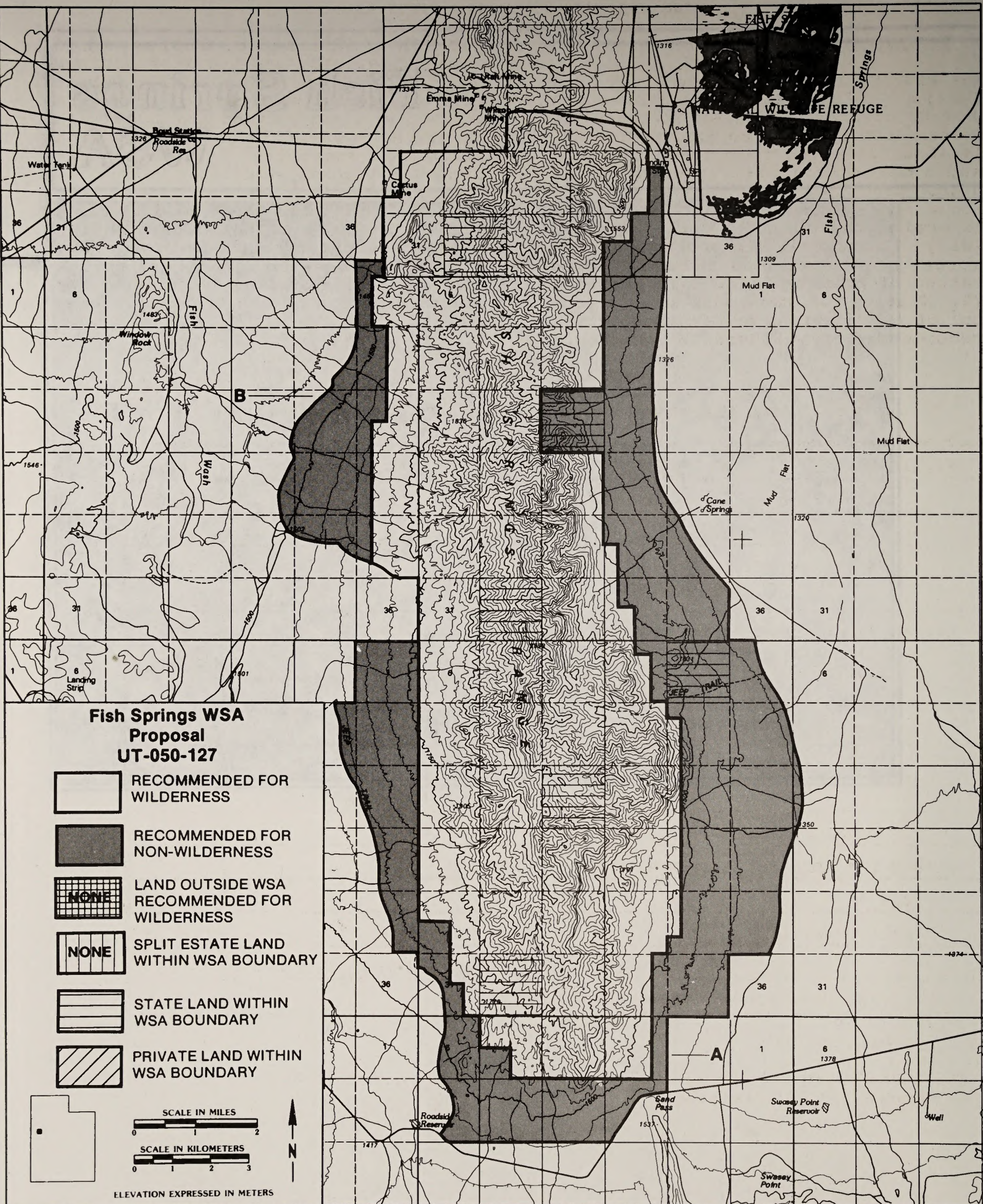
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R. 14 W.

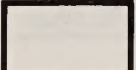

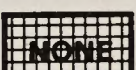
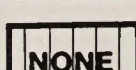
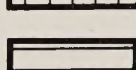
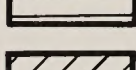
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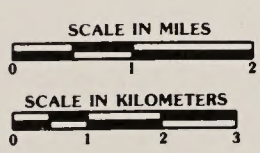
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Fish Springs WSA Proposal UT-050-127

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS

FISH SPRINGS WILDERNESS STUDY AREA

1. THE STUDY AREA: 52,500 acres

The Fish Springs Wilderness Study Area (WSA) (UT-050-127) is in northwestern Juab County, about 60 miles northwest of Delta, Utah (population 1,930). The WSA is about 16 miles from north to south and 6 miles from east to west at the widest part (see Map). The WSA contains about 52,500 acres of public land administered by the Bureau of Land Management (BLM). It includes six sections (3,840 acres) of State lands and an 80-acre parcel of private land. Four sections (2,560 acres) of State land and the parcel of private land are in the portion recommended for wilderness (see Table 1).

The WSA is bounded by improved and unimproved roads and the Fish Springs National Wildlife Refuge to the north-east. The recommended portion of the WSA is defined along section and subsection lines that generally correspond with changes in steepness of slope and enclose the highest wilderness values.

The WSA includes most of the Fish Springs Range, a north-south trending ridge that rises abruptly from 5,000 feet at the base to 8,500 feet at the crest. The Fish Springs Range is at the southern margin of the Great Salt Lake Desert.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	52,500
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	3,920
Total	56,420
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	33,840
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	33,840
In-holdings (State, private)	2,640
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	18,660
Split-Estate	0
Total BLM land not recommended for wilderness	18,660
In-holdings (State, Private)	1,280

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

FISH SPRINGS WILDERNESS STUDY AREA

Vegetation in the WSA is predominantly shrubs and grasses at lower elevations and scattered pinyon pine and juniper at higher elevations. Some white fir grows in isolated, higher locations.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative, where 33,840 acres would be designated as wilderness and 18,660 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 33,840 acres
(recommended for wilderness)
- 18,660 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 33,840 acres as wilderness and release the remaining 18,660 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts. This recommendation for wilderness will further apply to any additional in-holding acreage acquired through purchase or exchange with willing owners. The Appendix lists in-holdings in the recommended portion and provides information on their acquisition.

The portion of the WSA that is recommended for wilderness, however, includes all parts of the WSA that have outstanding opportunities for solitude and primitive recreation and the highest scenic quality in the WSA.

All of the area recommended for wilderness designation is in a completely natural condition with no human intrusions. The Fish Springs Range rises abruptly from the desert floor. Steep, dry and

craggy, it offers a vivid contrast to the flat lakebed surrounding it. Because of its proximity to plentiful water at the Fish Springs National Wildlife Refuge, the range is an excellent place to find a wide variety of wildlife, particularly raptors. Two endangered species are found here (peregrine falcon and bald eagle). About 74 percent (25,200 acres) of the recommended portion has outstanding opportunities for solitude and primitive recreation. Opportunities for geologic sightseeing and study are above average. No significant conflict with other uses exists.

The portion of the WSA (Areas A and B) not recommended for wilderness designation is mostly foothills or benchlands that lack outstanding opportunities for solitude and primitive recreation. Wilderness designation of this portion of the WSA would impose constraints on possible livestock management and wildlife habitat improvements. These resource values and uses are thought to be more significant than the relatively minimal wilderness values.

3. CRITERIA USED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The main portion of the Fish Springs Range is in a natural condition. The entire WSA meets the Wilderness Act criteria for naturalness. For the most part, the vegetation and topography blend over the range of elevation and appear untouched by man's activities. The lower slopes on the margin of the WSA have a variety of vehicular ways in various stages of natural rehabilitation. A U.S. Air Force (USAF) High Accuracy Multiple Object Tracking System (HAMOTS) facility was installed in the WSA in 1979, disturbing an area only 40 feet in diameter. The facility is nonimpairing under the Interim Wilderness Management guidelines and BLM has stipulated that it be removed if the

FISH SPRINGS WILDERNESS STUDY AREA

WSA is designated as wilderness. A cruise missile crashed in the WSA in 1984 but the crash site was restored to a natural condition.

B. Solitude

Opportunity for finding solitude, i.e., seclusion from other people, is outstanding in the central part of the WSA on 25,200 acres (48 percent of the WSA).

The WSA is large enough to allow visitors to find seclusion. The range is long and narrow and is dissected by narrow, deep and winding canyons. The canyons and steep slopes and ridges offer possibilities for finding solitude. Isolated pinyon-juniper woodlands and scattered white fir stands at higher elevations also provide solitude.

Occasional traffic on nearby roads is not considered to have a significant effect on solitude in the WSA.

The Fish Springs WSA is in the South Range of the USAF Utah Test and Training Range (UTTR), one of the busiest military air spaces in the country. From 100 to 150 flights as low as 100 feet above the ground are made daily within the UTTR, 6 days a week. Most flights near the WSA are subsonic and are not directly over the WSA. These overflights can cause sight and sound distractions that lessen but do not eliminate overall opportunities for solitude.

Opportunities for solitude are not outstanding on the remaining 27,300 acres of public lands in the WSA. These areas are benchlands at lower elevations and include the portion that is not recommended for wilderness designation. The terrain does not provide solitude, and vegetative screening is very limited.

C. Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation were evaluated by considering miles of hiking routes in relation to size of the WSA, kind of recreational opportunities present, and quality of recreational opportunities. In the central part of the WSA, opportunities for primitive and unconfined recreation on 25,200 acres (48 percent of the WSA) meet the standards set by the Wil-

derness Act. The lower benchlands, comprising the remaining 27,300 acres in the WSA, do not meet the criteria. In the portion of the WSA recommended for wilderness designation, 74 percent meets the standards for primitive and unconfined recreation.

Only one recreational activity, however, geologic sightseeing, is considered to be better than of average quality. Opportunities for this activity are best in the rugged central portion of the WSA.

D. Special Features

The Fish Creek Range is a tilted fault block of sedimentary rocks, and includes bedding plane faults visible in over 28,000 acres in the central part of the WSA. This phenomenon is of interest to geologists.

The WSA has been proposed for reintroduction of desert bighorn sheep. Bald eagles and peregrine falcons, both of which are endangered species, and golden eagles, a BLM sensitive species, inhabit the WSA. The area is considered to be crucial yearlong habitat for golden eagles.

Candidate threatened or endangered species that may occur in the WSA include the ferruginous hawk, Swainson's hawk, long-billed curlew, western snowy plover, white-faced ibis, and Bonneville pocket gopher. The bird species frequent areas throughout the Great Basin and other parts of the western United States and are not confined to the Fish Springs WSA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would add a potential natural vegetation (PNV) ecosystem not presently represented in

FISH SPRINGS WILDERNESS STUDY AREA

Utah, although it is represented in the NWPS outside the state.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area. The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV in the WSA is juniper-pinyon woodland (12,500 acres) and saltbush-greasewood (40,000 acres). Both kinds of PNV are represented in the NWPS nationally and in other BLM study areas in Utah and other states. This

information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah and Provo-Orem, Utah standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of these population centers.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	4	81,301	77	2,150,403
Saltbush-Greasewood	3	45,553	37	1,020,726
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	1	2,600	13	247,033
Saltbush-Greasewood	0	0	7	106,845

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,099,962	78	2,207,175
Provo-Orem, Utah	11	721,793	90	2,734,368

Source: BLM File Data.

C. Balancing the Geographic Distribution of Wilderness Areas

A Fish Springs Wilderness would not contribute significantly to balancing the geographic distribution of areas within

the NWPS in the west central United States. Designation of the WSA could, however, contribute to the geographic distribution of NWPS areas in the Great Basin of Utah and Nevada.

FISH SPRINGS WILDERNESS STUDY AREA

As of January 1987, the NWPS included 23 areas comprising 4,868,316 acres in Utah and the nearest adjacent states (Idaho and Nevada). In a clockwise direction within a 100 mile radius of the Fish Springs WSA, beginning to the northeast, are the 25,500-acre Deseret Peak Wilderness, the 30,088-acre Lone Peak Wilderness, and, to the east, the 28,000-acre Mt. Nebo Wilderness. All are in National Forests.

No wilderness areas have been designated west or south in the vicinity of the WSA, however. In the Great Basin, there are only six designated wilderness areas totaling 272,994 acres but no wilderness areas in the Great Basin have the same combination of PNV as the WSA (see "Expanding the Diversity of Natural Systems. . ."). If designated, a Fish Springs Wilderness would supplement the distribution of wilderness in the Great Basin.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be managed as wilderness to preserve values now present in the area. Resource and land use conflicts are not now a problem in the WSA and are not anticipated to be in the future.

Provision of access to and activities on 2,640 acres of State and private land inheld in the portion of the WSA recommended as wilderness could affect wilderness values and uses in the study area. BLM could not administratively control development of those lands. However, little or no development is projected for the in-held lands in the foreseeable future. There are no mineral leases on public lands in the WSA. Of 108 mining claims in the WSA, 96 are in the area recommended as wilderness. Valid claims could be developed following designation, but development is not expected in the foreseeable future.

Vehicular use and recreation would not be a management problem. The WSA is isolated and recreational use is estimated at not more than 50 annual visitor days. The area is presently open for ORV use but little or no such activity is occur-

ring. Livestock grazing could continue as at present in the designated area, requiring little or no change in management.

The USAF has stated that low level military overflights will continue in the UTR, including the Fish Springs Range, regardless of whether or not the WSA is designated as wilderness. Overflights by military aircraft therefore would continue and would detract from opportunities for solitude. BLM management could not mitigate such disturbance. This conflict can only be resolved on the Congressional level.

There is a USAF High Accuracy Multiple Object Tracking Station (HAMOTS) in the WSA. This portable unit was determined to be nonimpairing to wilderness values. It was allowed in the WSA with the stipulation that it be removed if the area were designated as wilderness. Therefore, it is not a manageability problem.

The area not recommended for wilderness designation also could be managed as wilderness. Little or no change in use is expected, and present management would continue.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Fish Springs WSA (USGS Bulletin 1745-A, David A. Lindsey, et al., 1989). A mineral resource study of the 33,840-acre area proposed for wilderness was done in 1987. The results indicate that the northwestern and southeastern parts of the area studied contain inferred subeconomic resources of high-purity quartzite. No metallic mineral resources were identified in the area proposed for wilderness, but more than 17 million pounds of lead, 2.6 million ounces of silver, and minor amounts of copper, zinc, and gold have been produced from the Fish Springs mining district, which is immediately outside the northwest boundary of the WSA. The potential for undiscovered deposits of these metals and molybdenum is high near the northern end of the area that was studied, adjacent to the mining district; moderate near the southern end; and low in the remainder of the area. The resource potential for

FISH SPRINGS WILDERNESS STUDY AREA

undiscovered deposits of high-purity limestone and dolomite is moderate throughout the area except where quartzite is present. Potential for undiscovered low-temperature geothermal resources and for gas and oil is low throughout the area.

According to BLM geologists, small structural traps containing oil and gas may occur in the WSA, but their existence is highly speculative. The geology of the Fish Springs Range is unfavorable for large deposits of oil and gas.

Small amounts of fluorite and barite have been found in the WSA.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives including designation of the entire area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 53 inputs specifically addressing this WSA were received from 63 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 40 commenters supported the wilderness designation for part or all of the WSA, while 18 commenters were opposed. Five commenters addressed the

relative merits of the EIS, but took no formal position on wilderness designation.

The majority of those favoring wilderness designation were from urban parts of Utah and from other states. Of particular concern was the need to protect wilderness values and threatened species.

Those opposing wilderness were concerned that wilderness designation would preclude mineral exploration and development, cause conflicts with the use of in-holdings and with nonprimitive recreational use, and restrain wildlife management. They also felt that the WSA is not manageable as wilderness. Half of those opposed to wilderness designation are local citizens. Nearly half of those opposed are affiliated with the mineral and livestock industries.

One Federal agency, the USAF, commented on the Draft EIS for this WSA. The USAF did not take a position regarding designation or nondesignation of the WSA. The USAF noted that low altitude flights will continue over the WSA with or without wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level.

The USAF also commented on the presence of and need for HAMOTS and other communication facilities in the WSA and on other public lands in the UTTR. It is the USAF's position that these facilities in their current location and other locations in the future are critical to the success of advanced defense testing at the UTTR and that BLM must allow these communication facilities to remain in place following wilderness designation. This would not be possible under BLM's current Wilderness Management Policy.

No comment letters were received on the Final EIS.

There are six State sections (3,840 acres) in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation

FISH SPRINGS WILDERNESS STUDY AREA

of the WSA. The State noted that the Fish Springs WSA has moderate wilderness values and conflicts. Mineral development conflicts are possible. Specific State comments on the Draft EIS dealt with desert bighorn sheep transplants, and the accuracy of the geology, mining claim, vegetation, and mineral development discussions.

The Juab County Commission is opposed to designation of the WSA as wilderness. The County generally prefers that open spaces be used for many purposes on public lands. The Juab County Commission has endorsed the Consolidated Local Government Response to Wilderness which opposes wilderness designation for BLM lands in Utah.

FISH SPRINGS WSA

Table 4
Comparative Summary of Impacts by Alternative

		Alternatives	
		Recommendation Partial Wilderness (33,840 Acres)	All Wilderness (52,500 Acres)
Issue Topics		No Action/No Wilderness	
Impacts on Wilderness Values		Wilderness values would be preserved in the designated area which is about 64 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 2 acres due to guzzler development. Vehicular use of 8 miles of ways would detract from opportunities for solitude and primitive recreation. Special features would be preserved.	Wilderness values would be preserved. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 2 acres due to guzzler development. Closing all ways to vehicular use would enhance opportunities for solitude and primitive recreation. Special features would be preserved.
Impacts on Livestock Management		Partial wilderness designation would not affect livestock management since the grazing use is made in the nondesignated area.	Wilderness designation would result in restrictions on access and inconvenience to three livestock permittees and slightly increase costs of management and controlling predation on livestock.
Impacts on Air Force Operations		A U.S. Air Force High Accuracy Multiple Object Tracking Station (HAMOTS) would be removed from the WSA.	A U.S. Air Force HAMOTS would be removed from the WSA.

FISH SPRINGS WILDERNESS STUDY AREA

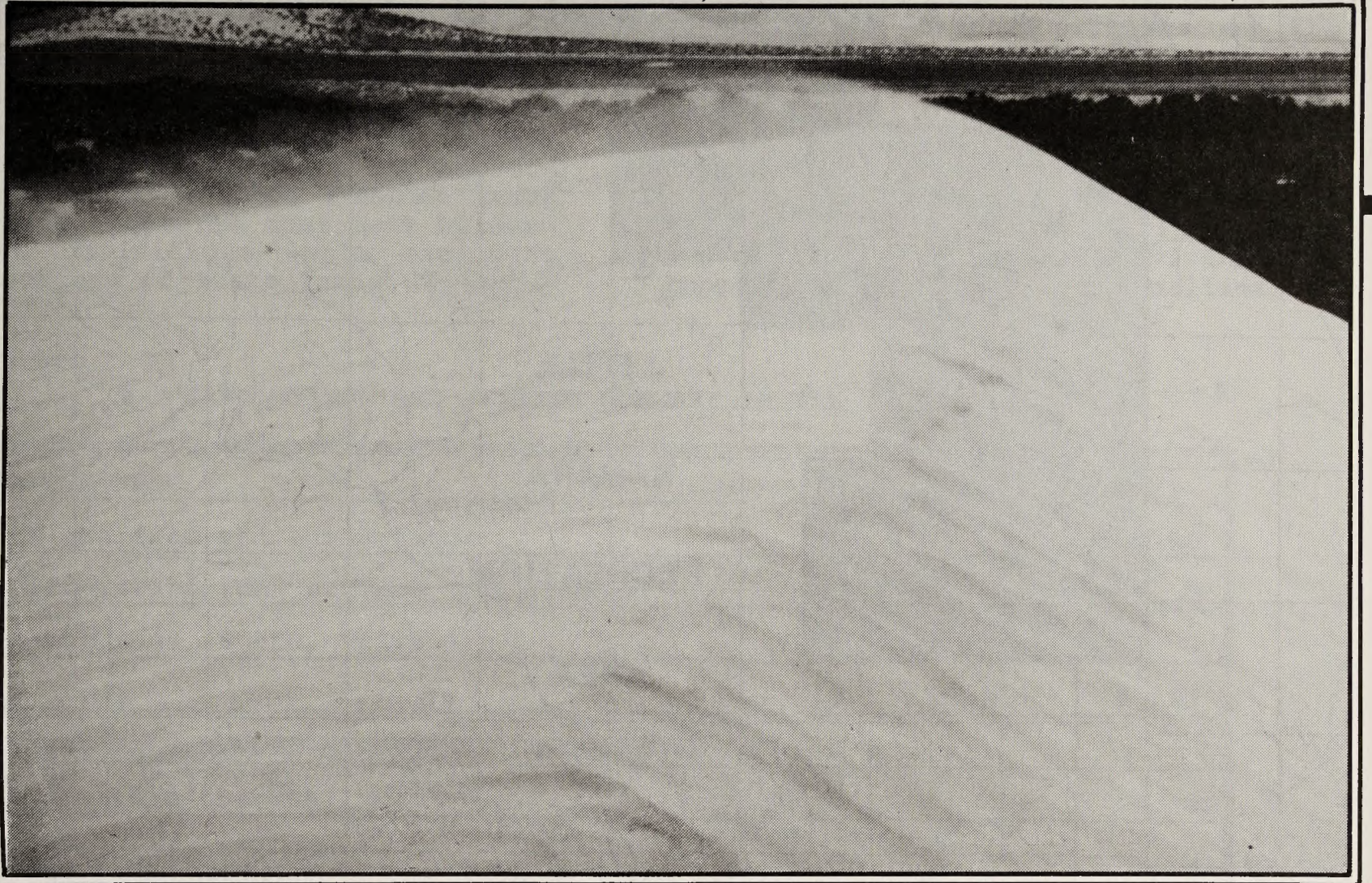
Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 11 S., R. 14 W., Sec. 32	640.00		State	Nb	Exchange		\$2,000
T. 12 S., R. 14 W., Sec. 32	640.00		State	Nb	Exchange		\$2,000
T. 13 S., R. 14 W., Sec. 16	640.00		State	Nb	Exchange		\$2,000
T. 13 S., R. 14 W., Sec. 32	640.00		State	Nb	Exchange		\$2,000
T. 11 S., R. 14 W., Sec. 31	80.00		Private	Nb	Purchase	\$4,300 to \$6,400	\$1,000

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

ROCKWELL WSA

Rockwell WSA



ROCKWELL WSA

R. 6 W.

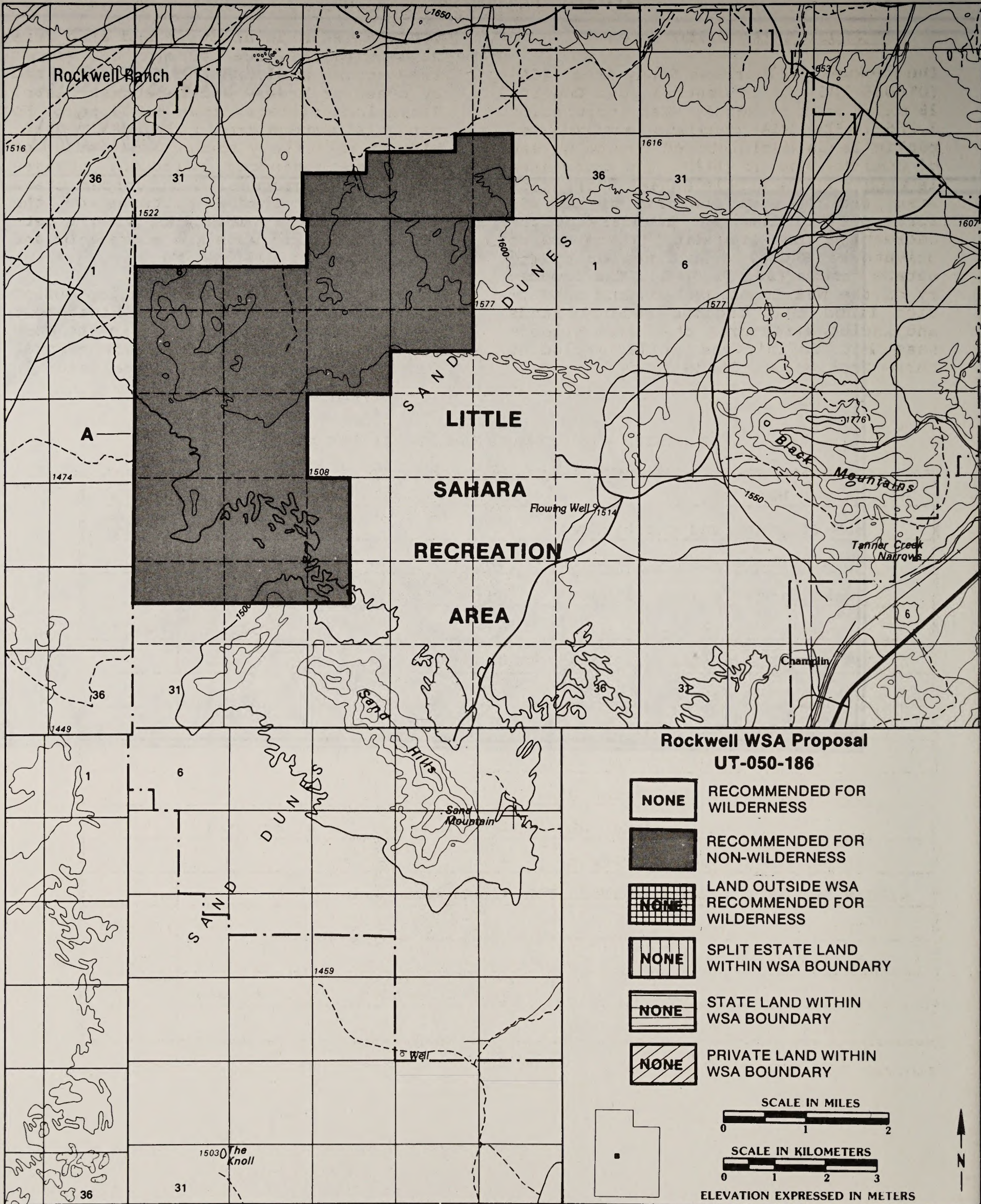
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R. 4 W.

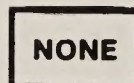

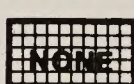
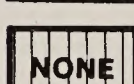
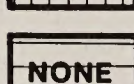
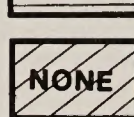
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T. 14 S.



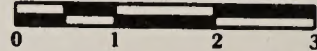
Rockwell WSA Proposal UT-050-186

-  NONE RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY

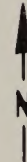
SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS



ROCKWELL WILDERNESS STUDY AREA

1. THE STUDY AREA 9,150 acres

The Rockwell Wilderness Study Area (WSA) (UT-050-186) is in central Juab County, 28 miles west of Nephi, Utah (population 3,285). The WSA consists entirely of public lands administered by the Bureau of Land Management (BLM). The study area is within BLM's Little Sahara Recreation Area, and the west boundary of the WSA forms part of the west boundary of the recreation area (see Map). There are no private or State in-holdings or split-estate tracts (see Table 1). The boundary of the WSA is on section and subsection lines that enclose Federal lands and includes features that meet Wilderness Act definitions while excluding three sections of State lands.

The WSA is in an alluvium and sand dune covered valley. The terrain consists of free-moving sand dunes, dunes stabilized by trees or brush, and sagebrush flats. Elevations average about 5,000 feet. No perennial waters are in the WSA. Vegetation is relatively sparse, consisting of scattered junipers, saltbush, greasewood, and sagebrush. Old juniper trees and changing shadow patterns on the dunes provide a variety of visual settings. Principal uses are recreation and habitat for wildlife.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	9,150
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	9,150
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	9,150
Split-Estate	0
Total BLM land not recommended for wilderness	9,150
In-holdings (State, Private)	0

Source: BLM File Data

ROCKWELL WILDERNESS STUDY AREA

November 1990. Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative which is the recommendation in this report and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

0 acres

(recommended for wilderness)

9,150 acres

(recommended for nonwilderness)

The recommendation for this WSA is to release all of the area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

If the area is released from wilderness it will automatically fall under the existing designation "Outstanding Natural Area/Area of Critical Environmental Concern (ONA/ACEC)." This designation provides management direction to maintain natural conditions.

The entire WSA is natural, but almost half the area lacks outstanding opportunities for solitude and primitive recreation (45 and 46 percent, respectively). About 38 percent of the WSA has outstanding scenic quality because of the changing colors and forms of the sand dunes, but 62 percent of the area consists of grass, sagebrush, and juniper-covered hills and flats of average or poor scenic quality.

Intense off-highway vehicular (OHV) recreational activity in the adjacent Little Sahara Recreation Area reduces opportunities for solitude in the WSA. To avoid effects of this activity in the WSA would be difficult without imposing constraints on vehicular recreation in the Little Sahara Recreation Area and negating the primary use of that area.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The free flowing dunes quickly erase evidence of activity. Essentially all of the 9,150 acres are considered natural. The only intrusion is a vehicular way in the north-central part of the WSA which penetrates for about 1 mile, and is substantially unnoticeable. In August 1986, a wildfire burned 2,500 acres in the southwestern portion of the WSA. The burned area was not rehabilitated, but it now appears natural.

B. Solitude

The Rockwell WSA is relatively small (2 to 4 miles wide by 5 miles long), but the sand hills in the interior provide sufficient screening and are far enough from motorized activity to furnish outstanding opportunities for solitude on 5,044 acres, or 55 percent of the WSA.

The lack of topographic and vegetative screening and adjacent motorized recreation activities make opportunities for solitude less than outstanding on 4,106 acres (45 percent of the WSA). Several motorcycle races are held throughout the year adjacent to and on all sides of the WSA. Considerable additional OHV use occurs 1 to 2 miles south of the WSA. Although the WSA was administratively closed to OHV use in 1974, BLM has found it difficult to prevent OHV intrusion in the WSA due to the intensity of activity in the surrounding portions of the Little Sahara Recreation Area. The eastern and southern boundaries of the unit are difficult to define, post, and patrol.

ROCKWELL WILDERNESS STUDY AREA

C. Primitive and Unconfined Recreation

Overall quality of opportunities for primitive unconfined recreation meets the Wilderness Act standards on approximately 4,945 acres (54 percent of the WSA). BLM estimates annual nonvehicular recreation within the WSA at 3,960 user days. Opportunities for nature study and photography are outstanding but opportunities for all other forms of unconfined and primitive recreation are less than outstanding. The outside sights and sounds of OHV activity reduce the quality of primitive recreation opportunities.

Opportunities for primitive recreation on approximately 4,205 acres (46 percent of the WSA) do not meet the standards sufficiently to be rated as outstanding.

D. Special Features

Special features in the WSA include old gnarled junipers, drifting sand dunes, and a unique plant (Atriplex canescens var gigantea). Old gnarled junipers are scattered throughout the 5,200 acres of juniper woodlands within the WSA. Free-moving sand dunes cover approximately 2,654 acres.

Atriplex canescens var. gigantea, a four-wing saltbush that grows to 10 feet tall is found in the WSA and appears to be the last relic community of a plant species that was once widespread. The species is of great interest to botanists and the BLM. Its only known occurrence is on free-moving sand dunes in the Little Sahara Recreation Area and the WSA. Protection of the species is a major reason for currently managing the WSA as an ACEC-Natural Area.

Bald eagles, an endangered species, are found in the WSA. Candidate threatened or endangered species that may inhabit the WSA include the ferruginous hawk, Swainson's hawk, long-billed curlew, western snowy plover, and white-faced ibis. These species also frequent other areas in the Great Basin.

Thirty-eight percent of the WSA is classified as having outstanding scenic quality due to the form and color of the sand dunes.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would add a potential natural vegetation (PNV) ecosystem (Great Basin sagebrush) presently represented in the NWPS in only one wilderness and not represented at all in the NWPS in Utah. PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV types in the WSA are Great Basin sagebrush (6,405 acres) and saltbush-greasewood (2,745 acres). Saltbush-greasewood is not represented in Utah in the NWPS but is represented nationally and in other BLM study areas in and outside of Utah. The combination of the two ecosystems is currently represented in the NWPS, but is represented in other BLM study areas in and outside of Utah.

This information is summarized in Table 2 from data compiled in February 1989 and from BLM files.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah and Provo-Orem, Utah major population centers. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Rockwell WSA would not contribute significantly to balancing the NWPS. Six designated wilderness areas administered by the U.S. Forest Service (FS) are within 100 miles of the WSA. In a clockwise direction, beginning to the north,

ROCKWELL WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Great Basin Sagebrush	1	32,407	56	1,212,870
Saltbush-Greasewood	3	43,553	37	1,057,981
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Great Basin Sagebrush	0	0	1	14,000
Saltbush-Greasewood	0	0	7	144,100

Source: BLM File Data.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,099,962	78	2,250,525
Provo-Orem, Utah	11	721,793	90	2,777,718

Source: BLM File Data.

are the 25,500-acre Deseret Peak Wilderness, the 16,000-acre Mt. Olympus Wilderness, the 11,334-acre Twin Peaks Wilderness, the 8,922-acre Lone Peak Wilderness, the 10,750-acre Mt. Timpanogos Wilderness, and, to the east, the 28,000-acre Mt. Nebo Wilderness. All are in National Forests. No wilderness areas have been designated in the Great Basin in Utah and Nevada within 100 miles south or west of the WSA, but the WSA does not include wilderness values that would contribute significantly to balancing the geographic distribution of wilderness areas in the Great Basin.

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

The WSA can be managed as wilderness, but to do so would require partial or complete restraints on OHV recreational activity in adjacent parts of the Little

Sahara Recreation Area. Current and planned management practices would protect or enhance existing wilderness values, while allowing nondetrimental uses of the area. The WSA is managed as an ACEC under Section 202 of the FLPMA. Under ACEC designation, the WSA is withdrawn from mineral location and closed to mineral leasing and sale; closed to OHV use, woodland product harvest, and hunting; and zoned to protect visual resources. There are 24 mining claims in the area that, if valid, could be developed following wilderness designation. However, the probability of development is low in the foreseeable future. Domestic livestock grazing use can continue as already authorized in applicable BLM planning documents. Development, use, and maintenance of improvements for livestock grazing, wildlife, and water resources could be allowed if in conformance with BLM plans, although none are currently proposed. Wilderness designation would not provide any addition-

ROCKWELL WILDERNESS STUDY AREA

al directives that are necessary to preserve the sensitive resources in the WSA.

Energy and Mineral Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area. According to BLM geologists, the potential for recoverable mineral resources in the WSA is generally low. The few oil and gas deposits that have been found in the Great Basin are small and scattered, and there is no assurance that favorable conditions exist within the WSA. Metallic minerals have been mined or found in the mountains around the WSA. The few rock outcrops in the study area do not give any indication of such minerals, however, and any mineral resources that may exist in the WSA would be at depths of 1,000 feet or more making recovery uneconomical.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values which is considered to be the only resource that would be significantly affected by designation or non-designation of the WSA as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be a significant issue in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 38 inputs specifically addressing this WSA were received from 34 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same

commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 14 commenters supported wilderness designation for part or all of the WSA, while 16 commenters were opposed. Four commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features in the WSA and opportunities for solitude. The majority of these commenters were equally from Utah and other states. Of particular concern to them was the need to add diversity to the NWPS by incorporating areas such as the Rockwell WSA; protect wildlife, wildlife habitat, and threatened species; and to protect the area from OHV use.

Those opposing wilderness were concerned that wilderness designation would preclude mineral exploration and development; interfere with water rights and development; harm state and local economy; and would be unnecessary to manage the area. The majority of those who opposed wilderness for the WSA were local citizens.

One Federal agency, the USBM, commented on the Draft EIS for this WSA. The USBM did not take a position regarding designation or nondesignation but commented that BLM had understated the petroleum potential of the WSA.

No comment letters were received on the Final EIS.

There are no State in-holdings in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State noted that the Rockwell WSA has problems with wilderness management because of loss of solitude resulting from OHV use in the adjacent Little Sahara Recreation Area. The State does support designation of the Rockwell Natural Area as an ACEC. Specific State comments on the Draft EIS dealt with inadequacies of

ROCKWELL WILDERNESS STUDY AREA

the geology discussion and wording of the endangered plant section.

The Juab County Commission is opposed to designation of the WSA as wilderness. The County generally prefers that open spaces be used for many purposes on public lands. The Juab County Commission has endorsed the Consolidated Local Government Response to Wilderness which opposes wilderness designation for BLM lands in Utah.

ROCKWELL WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives	
Issue Topics	All Wilderness (9,150 Acres)
Recommendation No Action/No Wilderness	
Impacts on Wilderness Values	Wilderness values of naturalness, opportunities for solitude and primitive recreation, and special features would be preserved. In spite of wilderness designation, outside sights and sounds from ORV activity would continue to detract from opportunities for solitude and primitive recreation in about 45 percent (4,106 acres) of the WSA.
	Because BLM would manage the area as an ONA/ACEC, wilderness values of naturalness, opportunities for solitude and primitive recreation, and special features would remain as at present. Outside sights and sounds from ORV activity would continue to detract from opportunities for solitude and primitive recreation in about 45 percent (4,106 acres) of the WSA.

SWASEY MOUNTAIN WSA

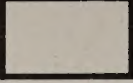


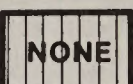
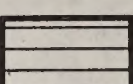
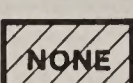
SWASEY MOUNTAIN WSA

Swasey Mountain WSA



SWASEY MOUNTAIN WSA

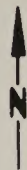
Swasey Mountain WSA Proposal UT-050-061

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY

SCALE IN MILES
0 1 2

SCALE IN KILOMETERS
0 1 2 3

ELEVATION EXPRESSED IN METERS



T. 15 S.

T. 16 S.

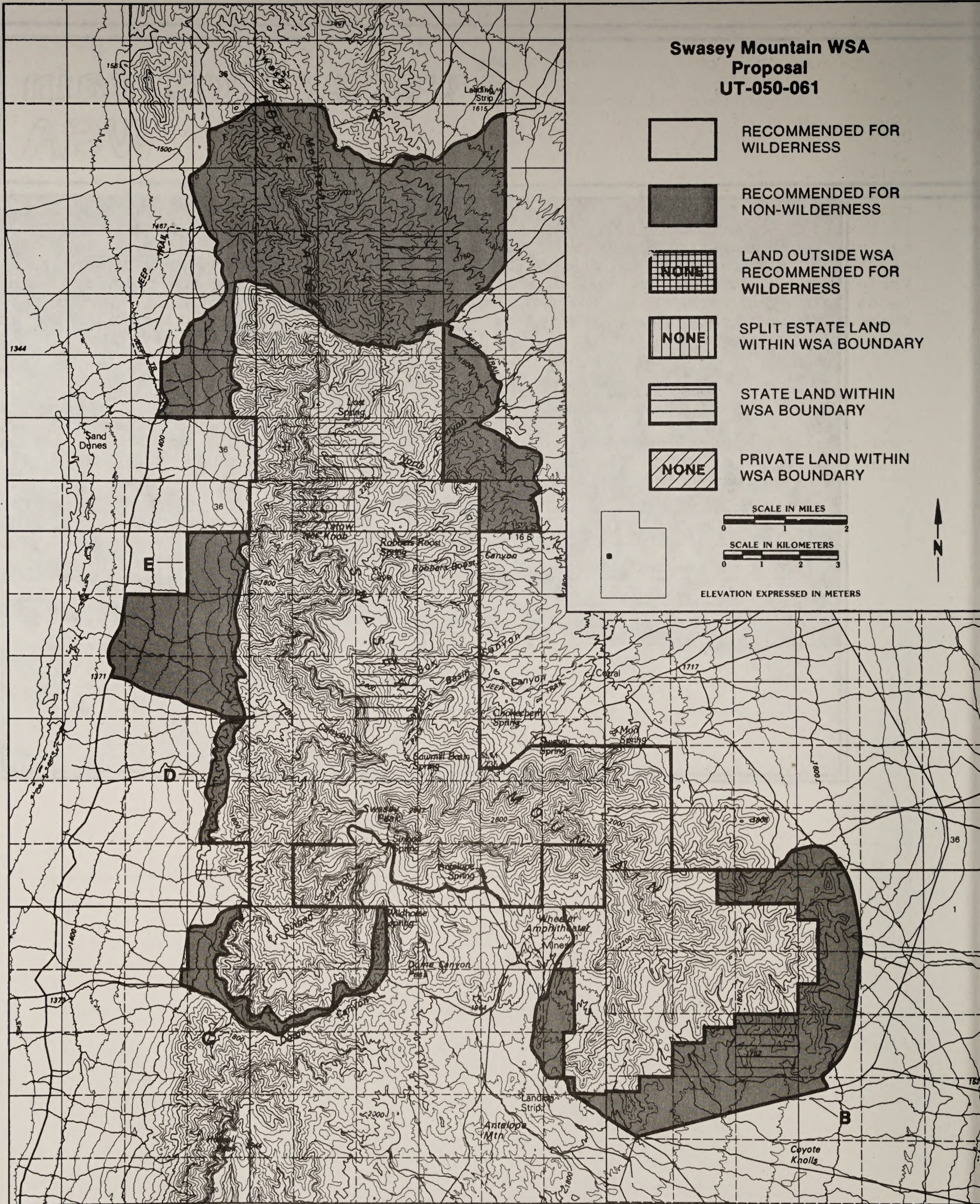
T. 17 S.

R. 14 W.

R. 13 W.

R. 12 W.

October 1991



SWASEY MOUNTAIN WILDERNESS STUDY AREA

1. THE STUDY AREA: 49,500 acres

The Swasey Mountain Wilderness Study Area (WSA) (UT-050-061) is in the northern House Range, in northwestern Millard County, about 35 miles west of Delta, Utah (population 1,930). The study area is an "L" or boot-shaped unit about 17 miles from north to south and 12 miles from east to west in the southern portion (see Map). It includes 49,500 acres of public land administered by the Bureau of Land Management (BLM) and 5 sections (3,078 acres) of State land (see Table 1). No private or split-estate lands are within the WSA. The WSA is surrounded mostly by public lands, but 13 State sections are adjacent.

Improved and unimproved roads and section lines that exclude the State lands on the margins and enclose public lands that fulfill the Wilderness Act criteria delimit the WSA. The Howell Peak WSA (UT-050-077) is directly south, separated from the Swasey Mountain WSA by a County maintained road.

The central portion of the WSA is very rugged. Elevations range from around 5,000 feet at the edges of the WSA to Swasey Peak (9,669 feet) and Tatow Knob (8,416 feet). Pinyon-juniper woodland is the dominant vegetation type, and stands of Douglas fir, white fir, limber pine, ponderosa pine, bristlecone pine, and aspen grow at higher elevations.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA***

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	49,500
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	3,078
Total	52,578
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	34,376
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	34,376
In-holdings (State, private)	1,798
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	15,124
Split-Estate	0
Total BLM land not recommended for wilderness	15,124
In-holdings (State, Private)	1,280

Source: BLM File Data

* The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

SWASEY MOUNTAIN WILDERNESS STUDY AREA

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative, where 34,376 acres would be designated as wilderness and the remaining 15,124 acres would be released for other uses, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

34,376 acres

(recommended for wilderness)

15,124 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate 34,376 acres as wilderness, and to release the remaining 15,124 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts. This recommendation for wilderness will further apply to any additional in-holding acreage acquired through purchase or exchange with willing owners. The Appendix lists all in-holdings in the recommended portion and provides information on acquisition of in-holdings.

The recommended partial wilderness alternative includes the highest and most mountainous portion of the WSA which contains the most wilderness values. All of the area recommended for wilderness designation is natural. About 94 percent of the recommended portion has outstanding opportunities for solitude and primitive recreation and 30 percent has scenery of outstanding quality. Little or no conflict with other uses exists.

The portion of the WSA that is not recommended for wilderness designation (Areas A, B, C, D, and E on Map) is mostly benchlands without high quality

scenic values and outstanding opportunities for solitude and primitive recreation. Wilderness designation of this portion of the WSA would impose constraints on livestock management and vehicular recreation. Potential for mineral development and off-highway vehicular (OHV) recreation, although generally considered to be low in this WSA, are greater outside the area recommended for wilderness designation. BLM considers these resource values and potential uses to be more significant than the relatively minimal wilderness values. Area A has known potential for extraction of disseminated gold and possibly other locatable minerals. This area has the majority of the present mining claims. About 164 of the 177 claims in the WSA are in two claim blocks in the portion that would not be designated wilderness. These deposits have been explored by five companies. Intensive mapping and sampling have shown favorable results.

3. CRITERIA USED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. A wide variety of vegetation and topographic features provide a scenic treat to visitors in the area. At over 9,600 feet, Swasey Mountain is the highest peak in the House Range and a prominent West Desert landmark. Swasey Peak, Tatow Knob, and the sheer limestone cliffs along the west side are the most striking features. The east slopes are characterized by pinyon and juniper giving way to Douglas fir, white fir, and bristlecone pine on the upper portions. Essentially all of the WSA meets the naturalness criteria of the Wilderness Act. Approximately 11 miles of ways at lower elevations on the eastern side of the WSA are substantially unnoticeable. In 1983, mineral exploration activities, including two drill holes and 3,000 feet of road, affected a total area of about 1 acre. All disturbance was rehabilitated

SWASEY MOUNTAIN WILDERNESS STUDY AREA

in 1984. In 1987, a BLM communication site that had been installed on an 8 foot by 10 foot pad was removed and the site was restored to a substantially unnoticeable condition.

B. Solitude

About 32,175 acres (94 percent of the area proposed for wilderness designation) meet the Wilderness Act standards for solitude, or seclusion from other people.

The WSA is large enough for visitors to be unaware of others in the vicinity. Rugged terrain contributes to solitude in the central portion of the WSA, which is the portion recommended for wilderness. The highest points, Swasey Peak and Tatow Knob, provide outstanding views of Tule Valley, the Deep Creek Mountains, and Wheeler Peak in Great Basin National Park (Nevada), further contributing to the feeling of solitude. Vegetation also contributes to seclusion by screening visitors from each other; the most dense vegetation is also in the higher parts of the WSA.

The Swasey Mountain WSA is in the South Range of the U.S. Air Force (USAF) Utah Test and Training Range (UTTR), one of the country's busiest military air spaces. From 100 to 150 daily flights, 6 days a week, are made in the UTTR. Some flights are as low as 100 feet above ground level. The WSA is within the area of heaviest use, and aircraft occasionally fly directly over the WSA. Although overflights in the vicinity of Swasey Mountain are usually subsonic, they can be an annoyance that detracts from but does not eliminate overall opportunities for solitude.

About 17,325 acres in the WSA, including the lower benchlands not recommended for wilderness designation, do not meet the standards for solitude. The terrain and sparse vegetation do not offer seclusion.

C. Primitive and Unconfined Recreation

Wilderness Act standards for primitive and unconfined recreational opportunities are substantially met in the central part of the WSA on 32,175 acres

(94 percent of the portion recommended for wilderness designation).

Opportunities for rockhounding, horseback riding, backpacking, and scenic viewing are considered to be above average in the central part of the WSA.

Approximately 17,325 acres in the benchlands on the margin of the WSA do not meet the standards for primitive and unconfined recreation due to relatively flat slopes and sparse vegetation.

D. Special Features

Bald eagles and peregrine falcons, both endangered species, and golden eagles, a BLM sensitive species, inhabit the WSA. Golden eagles nest in the WSA, and 49,000 acres are crucial yearlong golden eagle habitat.

Six candidate threatened or endangered species that could inhabit the WSA include the ferruginous hawk, Swainson's hawk, long-billed curlew, western snowy plover, white-faced ibis, and Swasey Spring pocket gopher. The birds also frequent areas throughout the Great Basin and western United States.

On the higher slopes are 1,100 acres of bristlecone pine, one of the oldest living species of trees. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

A herd of 77 wild horses roams the WSA. Although wild horses are not unique in the western United States, they are of considerable interest to most observers. Management plans are to maintain the herd at between 60 and 100 head.

The area around the WSA is considered to be outstanding in Utah and nationally for Cambrian trilobites. The best specimens found so far are on a section of State land adjacent to the WSA, but there are at least 150 acres of fossil beds within the WSA and specimens of high quality may be present. At least four caves also exist in limestone within the WSA.

SWASEY MOUNTAIN WILDERNESS STUDY AREA

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS, but it would add a PNV ecosystem (saltbush-greasewood) not now represented in the NWPS in Utah.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV types

in the WSA are juniper-pinyon woodland (14,850 acres) and saltbush-greasewood (34,650 acres). Juniper-pinyon woodland is not widely represented in the NWPS but is identified in several BLM WSAs both in and outside of Utah. The saltbush-greasewood ecosystem is also well represented in WSAs, but not in the NWPS. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah and Provo-Orem, Utah standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of these population centers.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	43,656	75	2,139,057
Saltbush-Greasewood	3	45,553	37	996,957
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	244,583
Saltbush-Greasewood	0	0	7	122,195

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	10	1,079,807	78	2,210,175
Provo-Orem, Utah	11	708,638	90	2,737,368

Source: BLM File Data.

SWASEY MOUNTAIN WILDERNESS STUDY AREA

C. Balancing the Geographic Distribution of Wilderness Areas

The Swasey Mountain WSA would not contribute significantly to balancing the geographic distribution of areas within the NWPS. It would contribute, however, to balancing the NWPS in the Great Basin.

As of January 1987, the NWPS included 16 areas comprising 866,915 acres in Utah and Nevada, the adjacent state nearest the WSA. The 25,500-acre Deseret Peak Wilderness is within 100 miles northeast of the WSA and the 28,000-acre Mt. Nebo Wilderness is to the east. Both are in National Forests. No wilderness areas have been designated to the north, west, or south in the vicinity of the WSA, however. Only three wilderness areas, totaling 272,994 acres, are in the Great Basin. Only three areas in the NWPS have the same combination of PNV types (see "Expanding the Diversity of Natural Systems . . ."). All three are in California.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be managed as wilderness to preserve values now present in the area. Resource and land conflicts are not now a problem in the WSA and are not anticipated to be in the future. The low probability of mineral resources in the recommended portion of the WSA indicate that potential for exploration would be low and therefore would not require special management attention. Current recreational use of about 500 annual visitor days is almost evenly split between vehicular and nonvehicular use. Wilderness designation would not affect this pattern, as most of the nonvehicular use is in the rugged central portion and vehicular use could continue in the portion not recommended for designation. Livestock grazing could continue as at present, requiring little or no change in management.

The USAF has stated that military flights will continue in the vicinity of the WSA, whether it is designated or not. Overflights would detract from

solitude, and BLM management could not mitigate such disturbance. This conflict could be resolved only at the Congressional level.

There are 18,722 acres of post-FLPMA oil and gas leases in the area recommended as wilderness. These leases are subject to the nonimpairment stipulations and could be managed to preserve wilderness values. There are also 13 mining claims in the area recommended for wilderness, but the potential for valid discoveries and eventual production are lower than in the portion of the WSA not recommended for wilderness. There are three sections of State land (1,798 acres) in the area recommended for wilderness. Mineral developments on these lands and provision of access to them could reduce the quality of opportunities for solitude and primitive recreation, mainly in the northern part of the recommended area. However, the mineral potential and, therefore, the probability of development is lower than in the area not recommended for wilderness designation.

The area not recommended for wilderness designation could also be managed as wilderness but any mineral-related activity that might take place in the WSA along with associated vehicular use, would be in that area.

There are 164 mining claims in the portion of the WSA not recommended for wilderness. The mineral potential and, therefore, the probability of valid mineral discoveries is higher in this portion of the WSA than in the portion recommended for wilderness.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Swasey Mountain WSA (USGS Bulletin 1749-A, David A. Lindsey, et al., 1989). The area studied comprises 34,376 acres, and includes the portion of the WSA that is recommended for wilderness designation. The report indicates that no mineral production has been recorded for the WSA. Inferred subeconomic resources include high-purity limestone, quartzite, and sand and gravel. Fossils, especially trilobites, of interest to collectors are present in the area. The

SWASEY MOUNTAIN WILDERNESS STUDY AREA

northern part of the study area has moderate potential for undiscovered resources of lead, zinc, copper, molybdenum, silver and gold, including disseminated gold deposits. The southwestern part of the study area also has moderate potential for resources of these metals. Potential for undiscovered deposits of high-purity limestone and dolomite and for oil and gas is moderate for the study area. The potential for undiscovered resources of geothermal energy is low. There is no potential for undiscovered resources of coal.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives including designation of the entire area as wilderness.

Local Social and Economic Considerations

The only known potential effects on local economic conditions would result from restrictions on mining of locatable minerals such as disseminated gold. Probable loss of employment opportunities with the all wilderness alternative would be less than 1 percent of the Millard County employment. No impacts on social conditions have been identified.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 57 inputs specifically addressing this WSA were received from 63 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 42 commenters supported the wilderness designation for part or all of the WSA, while 15 commenters were opposed. Six commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features present in the WSA and the protection offered by wilderness designation. The majority of those commenting in favor of wilderness were from urban areas in Utah. Of particular concern was the need to protect special features and primitive recreational opportunities.

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development. The majority of these commenters were from rural Utah, and were local to the area.

Three Federal agencies; the USAF, USBM, and National Park Service (NPS), commented on the Draft EIS. The Federal agencies did not take a position regarding designation or nondesignation of the WSA. The USAF noted that low altitude flights will continue over the WSA with or without wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level.

The USBM noted that BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. These findings have been incorporated into the Final EIS and study report. The USBM also commented that BLM had understated the petroleum potential of the WSA.

The NPS recommended that BLM identify the WSA as a proposed National Natural Landmark.

No comment letters were received on the Final EIS.

SWASEY MOUNTAIN WILDERNESS STUDY AREA

There are five State sections (3,078 acres) in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the Swasey Mountain WSA has had moderate to high wilderness values and conflicts. Wilderness would conflict with disseminated gold and porphyry molybdenum and that a boundary adjustment to delete the north quarter of the WSA would help to reduce livestock conflicts. Specific State comments on the Draft EIS dealt with errors in the mapping of State lands, inadequacies of the geology discussion, mineral relationships, and underestimation of the mule deer population by BLM.

The Millard County Master Plan does not specifically address wilderness. The Millard County Commission favors protection of natural and esthetic resources on public lands as well as multiple use and believes that these objectives can be met without wilderness designation. The Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation for BLM lands in Utah.

SWASEY MOUNTAIN WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives	
Issue Topics	All Wilderness (49,500 Acres)
	<p>Recommendation Partial Wilderness (34,376 Acres)</p> <p>No Action/No Wilderness</p>
Impacts on Wilderness Values	<p>Wilderness values would be preserved overall in the designated area which is about 69 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 50 acres and indirectly reduced in quality on up to 12,375 acres due to mining as with the No Action/No Wilderness Alternative. Special features would be preserved. Continued vehicular use of 3 miles of ways in the nondesignated area would detract from opportunities for solitude and primitive recreation.</p> <p>Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 50 acres and indirectly reduced in quality on up to 12,375 acres due to development of locatable minerals. Special features would not be significantly affected. Continued vehicular use of 11 miles of ways would detract from opportunities for solitude and primitive recreation.</p>
Impacts on Mineral and Energy Exploration and Production	<p>This alternative would not adversely affect mineral and energy exploration and development in the WSA because the portion of the WSA with known locatable minerals would not be designated as wilderness.</p> <p>Exploration and development opportunities for locatable minerals would be limited to claims valid at the time of designation. Opportunities for production of significant locatable minerals would be foregone. Loss of leasable and salable mineral production would not be significant because of their low probability of development.</p>

SWASEY MOUNTAIN WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives	
Recommendation		No Action/No Wilderness	All Wilderness (49,500 Acres)
Issue Topics	Partial Wilderness (34,376 Acres)		
Impacts on Wildlife Habitat and Populations	Effects would be the same as for the No Action/No Wilderness Alternative because the projected developments would be in the nondesignated area.	Less than 1 percent (50 acres) of the wildlife habitat would be directly affected. Populations would not be significantly reduced.	Direct disturbance of wildlife habitat would be reduced from 50 to 16 acres. Therefore, wildlife habitat and populations would benefit from wilderness designation.
Impacts on Recreational Use	Primitive recreation opportunities would be preserved in the designated area. Vehicular use would continue on 3 miles of ways in the nondesignated area, but most of the WSA would not be available for vehicular access. The loss of ORV opportunities would not be significant on a regional basis. Overall, recreation use would initially decline, and would be less than what would occur with the No Action/No Wilderness Alternative.	Vehicular use would continue on 11 miles of ways at current levels. Initially, both vehicular and primitive recreational use would increase. Eventually, the quality and extent of primitive use may decline as vehicular use increases.	The WSA, including 11 miles of ways, would be closed to vehicular use. Opportunities for primitive recreational use would be preserved while opportunities for motorized recreation would be eliminated. The loss of ORV opportunities would not be significant on a regional basis. Overall, recreation use would initially decline and would be less than what would occur with the No Action/No Wilderness Alternative.
Impacts on Economic Conditions	Effects would be the same as for the All Wilderness Alternative.	Local economic conditions would not be significantly affected. Local employment would be increased less than 1 percent by mineral development.	Employment losses would be less than 1 percent of the Millard County employment. Economic conditions would not be affected.

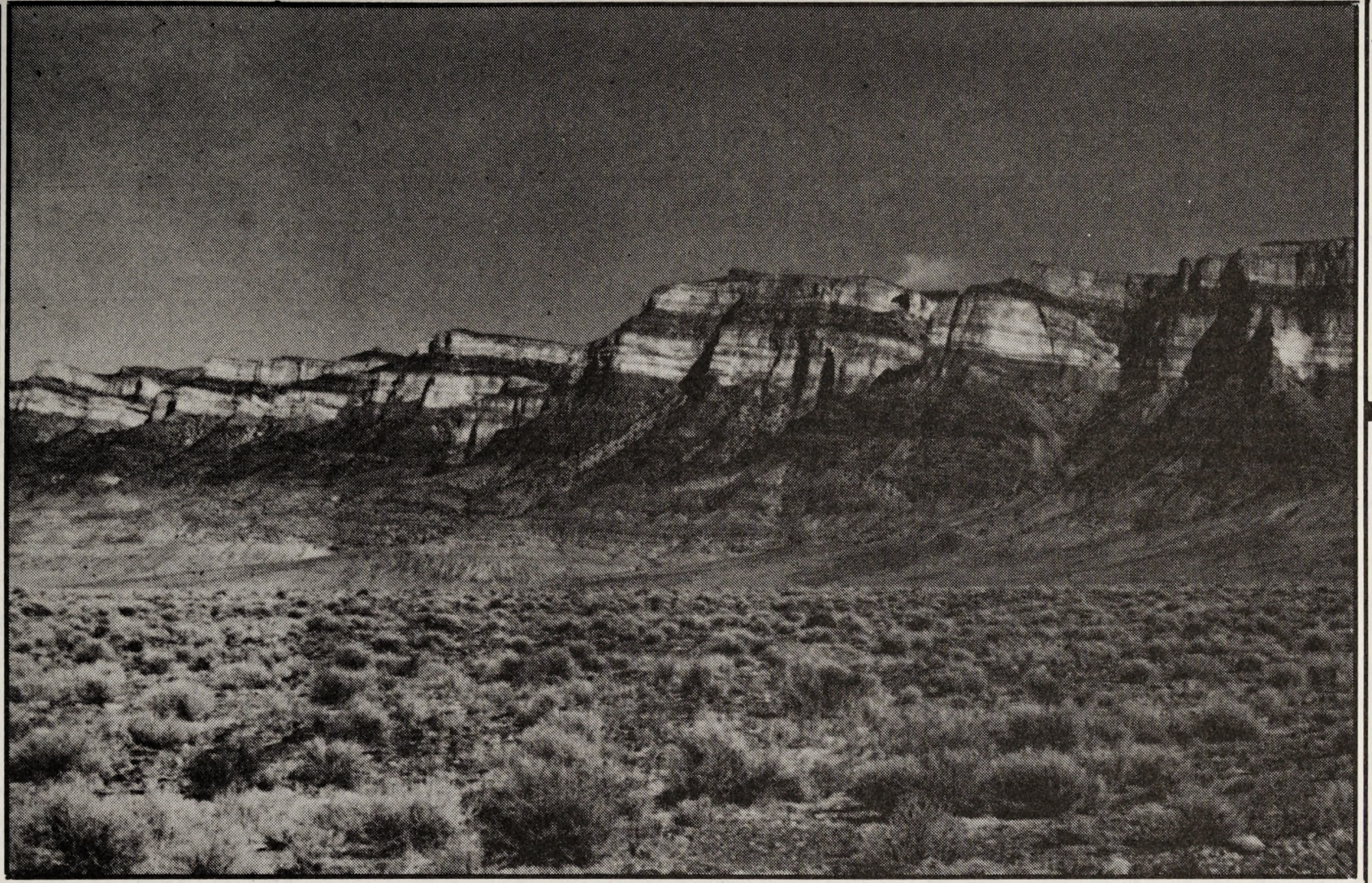
SWASEY MOUNTAINS WILDERNESS STUDY AREA

Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other)		Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)		Estimated Cost of Acquisition (Processing Costs)	
			(Surface Estate)	(Subsurface Estate)		(Land Costs)	(Processing Costs)		
T. 15 S., R. 13 W., Sec. 32	640.00		State	State	No	Exchange		\$2,000	
T. 15.5 S., R. 13 W., Sec. 32	517.70		State	State	No	Exchange		\$2,000	
T. 16 S., R. 13 W., Sec. 15	640.00		State	State	No	Exchange		\$2,000	

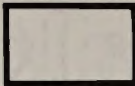

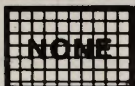
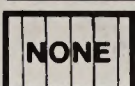
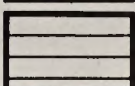
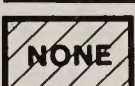
^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

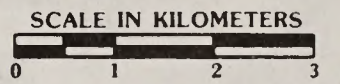
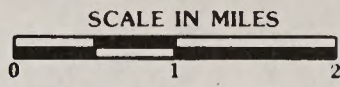
Howell Peak
WSA



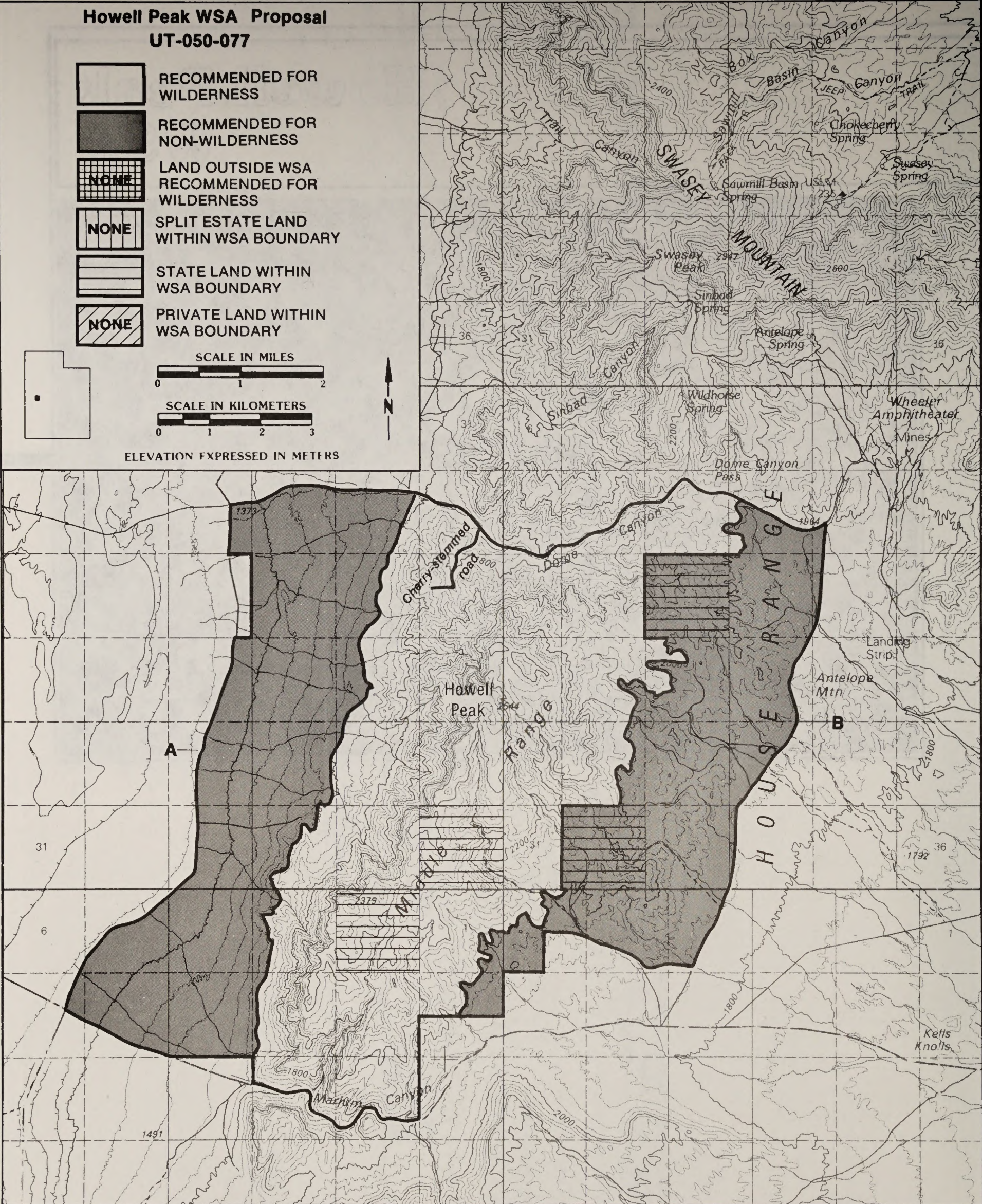
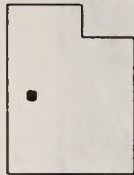
HOWELL PEAK WSA

Howell Peak WSA Proposal UT-050-077

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE
LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE
SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  NONE
PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS



HOWELL PEAK WILDERNESS STUDY AREA

1. THE STUDY AREA: 24,800 acres

The Howell Peak Wilderness Study Area (WSA) (UT-050-077) is in the House Range, in northwestern Millard County, about 45 miles west of Delta, Utah (population 1,930). The study area is roughly a parallelogram about 8 miles from north to south and 8 miles from east to west (see Map). It includes 24,800 acres of public land administered by the Bureau of Land Management (BLM) and four sections (2,559 acres) of State land (see Table 1). Two sections (1,279 acres) of State land are in the portion of the WSA that is recommended for wilderness. No private or split-estate lands are in the WSA. Improved and unimproved roads partly delimit the WSA on all sides except the southeast, where

the boundary has been drawn on section and subsection lines. The WSA is surrounded mostly by public lands. The boundary of the partial wilderness alternative is along roads and, on the east and west sides, along contour lines which mark a change in slope between the alluvial fans that form the foothills and the steeper, mountainous area. On the east side, the boundary also excludes State lands. The Swasey Mountain WSA (UT-050-061) is directly to the north, separated by a road and Notch Peak WSA (UT-050-078) is directly to the south.

Elevations in the WSA range from about 5,000 feet at the edges of the WSA to the crest of Howell Peak (8,348 feet), and Antelope Peak (7,805 feet). Shrubs

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN WILDERNESS STUDY AREA	ACRES
BLM (surface and subsurface)	24,800
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	2,559
Total	27,359
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within WSA)	14,800
BLM (outside WSA)	0
Split-Estate (within WSA)	0
Split-Estate (outside WSA)	0
Total BLM land recommended for wilderness	14,800
In-holdings (State, private)	1,279
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	10,000
Split-Estate	0
Total BLM land not recommended for wilderness	10,000
In-holdings (State, Private)	1,280

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

HOWELL PEAK WILDERNESS STUDY AREA

and grasses are the dominant vegetation at lower elevations with pinyon-juniper woodland at higher elevations.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative, where 14,800 acres would be designated as wilderness and the remaining 10,000 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

14,800 acres

(recommended for wilderness)

10,000 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate 14,800 acres as wilderness and to release the remaining 10,000 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts. This recommendation for wilderness will also apply to any additional in-holding acreage acquired through purchase or exchange with willing owners. The Appendix lists all in-holdings in the recommended portion and provides information on acquisition.

The recommendation is for the central, highest and most mountainous portion of the WSA, which includes the best wilderness values, to be designated as wilderness. All of the area recommended for wilderness designation is natural and has outstanding opportunities for solitude, but opportunities for primitive recreation are not outstanding. No conflict with other uses exist.

The portion of the WSA that is not recommended for wilderness designation

(Areas A and B) is mostly foothills and benchlands that lack scenic values and outstanding opportunities for solitude and primitive recreation, and have little variety in form or color. Wilderness designation of this portion of the WSA could impose constraints on livestock management, mining, and recreational fossil collecting.

3. CRITERIA USED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Essentially all of the WSA meets the naturalness criteria of the Wilderness Act. Approximately 7 miles of ways at lower elevations in the WSA are substantially unnoticeable. Mineral exploration activities included 2,000 feet of road. This disturbance was permitted under a grandfathered right, has since been abandoned and has not been rehabilitated.

The numerous caves trilobite beds, native vegetation, and escarpment provide a natural look to the WSA. Mule deer browse the highlands dominated by pinyon pine and juniper trees. Wild horses, deer, cougar, and coyotes can also be seen roaming and living in the playas between mountain ranges. Council Cave near Antelope Peak and the 8,348-foot striated limestone escarpment of Howell Peak can be seen from over 50 miles away.

B. Solitude

About 14,880 acres (including 100 percent of the area proposed for wilderness designation) meet the Wilderness Act standards for solitude, or seclusion from other people.

The WSA is of sufficient size to allow the number of expected visitors to be unaware of others in the vicinity. Rugged terrain, steep cliffs, and pinyon-juniper woodland contribute to solitude in the central portion of the WSA, which

HOWELL PEAK WILDERNESS STUDY AREA

is the portion recommended for wilderness.

The Howell Peak WSA is in the South range of the U.S. Air Force (USAF) Utah Test and Training Range (UTTR), one of the country's busiest military air spaces. From 100 to 150 daily flights, 6 days a week, are made in the UTTR. Some flights are as low as 100 feet above ground level. The WSA is within the area of heaviest use, and aircraft occasionally fly directly over the WSA. Although most of these overflights are subsonic and are not directly over the WSA, they can be an annoyance that detracts from but generally does not eliminate overall opportunities for solitude.

About 9,920 acres in the WSA, including the foothills and benchlands not recommended for wilderness designation, do not meet the standards for solitude. The terrain and sparse vegetation in this portion of the WSA do not offer seclusion and roads form most of the eastern and western boundaries.

C. Primitive and Unconfined Recreation

Opportunities for primitive, unconfined recreation, although diverse, are not of high quality and were therefore, judged not to be outstanding in this WSA.

D. Special Features

Bald eagles and peregrine falcons, both endangered species, and golden eagles, a BLM sensitive species, inhabit the WSA. Candidate threatened or endangered species, that could inhabit the WSA include the ferruginous hawk, Swainson's hawk, long-billed curlew, western snowy plover, and white-faced ibis. These species also frequent areas throughout the Great Basin and western United States. One candidate (Category 2) plant species, Cryptantha compacta, may occur in the WSA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

The area that includes the WSA is outstanding in Utah and the country

for Cambrian trilobites. The best specimens found to date were north of the WSA, but about 10 acres of trilobite-bearing beds are in the WSA.

Council Cave, near Antelope Peak, has the largest entrance of any cave in Utah, and is visible for 50 miles. Other caves also have been found in the WSA.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS. It would, however, add a PNV ecosystem, saltbush-greasewood, that is not represented in the NWPS in Utah.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV types in the WSA are juniper-pinyon woodland (14,880 acres) and saltbush-greasewood (9,920 acres). The PNV types in the WSA are not widely represented in the NWPS nationally but are well represented in other BLM study areas in Utah and other states. This information is summarized in Table 2, from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of these population centers.

HOWELL PEAK WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,139,027
Saltbush-Greasewood	3	45,553	37	1,021,687
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	244,553
Saltbush-Greasewood	0	0	7	136,925

Source: BLM File Data.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREA	ACRES
Salt Lake City-Ogden	10	1,079,807	78	2,234,875
Provo-Orem	11	708,638	90	2,762,068
Las Vegas, Nevada	38	3,132,130	54	2,134,358

Source: BLM File Data.

C. Balancing the Geographic Distribution of Wilderness Areas

A Howell Peak wilderness would not contribute significantly to balancing the geographic distribution of areas within the NWPS in the west central U.S. It would, however, contribute to balancing the NWPS in the Great Basin.

As of January 1987, the NWPS included 16 areas comprising 866,915 acres in Utah and Nevada, the nearest adjacent state. Only six wilderness areas, comprising 272,994 acres, are in the Great Basin.

The 25,500-acre Deseret Peak Wilderness is within 100 miles to the northeast of the WSA, and the 28,000-acre Mt. Nebo wilderness is to the east. Both are in National Forests.

No wilderness areas have been designated to the north, west, or south in the vicinity of the WSA. Only three wilderness areas in the NWPS have the same combination of PNV types as the Howell Peak WSA (see "Expanding the Diversity of Natural Systems . . ."). All three are in California.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be managed as wilderness to preserve values now present in the area. Resource and land conflicts are not now a problem in the WSA and are not anticipated to be in the future.

HOWELL PEAK WILDERNESS STUDY AREA

There are 11 post-FLPMA oil and gas leases in the portion of the WSA recommended as wilderness. All are subject to the nonimpairment stipulation and can be managed to protect wilderness values. Thirty-five of the 74 mining claims in the WSA are in the area recommended for wilderness, but development is not projected in the foreseeable future and they are not expected to be a manageability problem.

There are two State-owned sections (1,279 acres) in the middle of the southern part of the recommended area. Major developments on these sections and related access and activity would reduce the quality of wilderness values in the southern portion of the wilderness, but the potential for development is low.

Livestock grazing could continue as at present, requiring little or no change in management.

The USAF has stated that military flights will continue in the vicinity of the WSA, whether it is designated or not. Overflights would detract from solitude and BLM management could not mitigate such disturbance. This conflict can be resolved only at the Congressional level.

The area not recommended as wilderness also could be managed as wilderness. There are one oil and gas lease, 39 mining claims, and two State-owned sections in this portion of the WSA, but developments that would reduce the quality of wilderness values are not projected.

It would be administratively more difficult to protect this portion of the WSA from vehicle use and noise because the area is flatter and is bordered by roads. However, significant increases in vehicle use are not projected in the foreseeable future, and surface features such as rock are limiting to vehicle use.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Howell Peak WSA (USGS Bulletin 1749-A, David A. Lindsey, et al., 1989). The

report studied the portion of the WSA (14,800 acres) that is recommended for wilderness designation. The report indicates that no mineral production has been recorded for the WSA. Inferred sub-economic resources include high-purity limestone, quartzite, and sand and gravel. Fossils, especially trilobites, of interest to collectors are present in the area. The western part of the study area has moderate potential for undiscovered resources of lead, zinc, copper, molybdenum, silver and gold, including disseminated gold deposits. The potential for undiscovered deposits of high-purity limestone and dolomite and for oil and gas is moderate for the study area. The potential for undiscovered resources of geothermal energy is low. There is no potential for undiscovered resources of coal.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives including designation of the entire area as wilderness.

Local Social and Economic Considerations

Social and economic factors concerning this WSA were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 49 inputs specifically addressing this WSA were received from 62 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional input or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

HOWELL PEAK WILDERNESS STUDY AREA

In general, 40 commenters supported wilderness designation for part or all of the WSA, while 16 commenters were not in favor. Six commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features present in the WSA and the protection offered by wilderness designation. The majority of those commenting in favor of wilderness were from urban areas in Utah. Of particular concern was the need to protect special features and primitive recreational opportunities.

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development and inhibit woodland harvest. The majority of these commenters were from rural Utah, and were local to the area.

Two Federal agencies (USAF and USBM) commented on the Draft EIS for this WSA. The Federal agencies did not take a position regarding designation or non-designation of the WSA. The USAF noted that low altitude flights will continue over the WSA with or without wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level.

The USBM noted that BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. These findings have been incorporated into the Final EIS and study report. The USBM also commented that BLM had understated the petroleum potential of the WSA.

No comment letters were received on the Final EIS.

There are four State sections (2,559 acres) in the WSA. In commenting on the Draft EIS the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the Howell Peak WSA has outstanding wilderness values and an overall low degree of

conflicts compared to other WSAs in the region. The State noted that the partial wilderness alternative would exclude areas of low wilderness quality which are probably unmanageable as wilderness due to ease of access by OHV use, and would minimize potential conflicts with mineral and livestock interests. Specific State comments on the Draft EIS dealt with suggested wording changes in the discussion on endangered plants, addition of information on locatable minerals, and potential installation of a USAF communication facility on State land near the WSA.

The Millard County Master Plan does not specifically address wilderness. The Millard County Commission favors protection of natural and esthetic resources on public lands as well as multiple use and believes that these objectives can be met without wilderness designation. The Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation for BLM lands in Utah.

HOWELL PEAK WSA

Table 4
Comparative Summary of Impacts by Alternative

		Alternatives	
		Recommendation Partial Wilderness (14,800 Acres)	All Wilderness (24,800 Acres)
Issue Topics		No Action/No Wilderness	
Impacts on Wilderness Values	Wilderness values would be preserved in the designated area which is about 58 percent of the WSA. Vehicular use of 4 miles of ways in the nondesignated area would continue to detract from opportunities for solitude and primitive recreation.	Wilderness values would not be protected by wilderness designation. No significant disturbance of wilderness values is anticipated in the foreseeable future. Continued vehicular use of about 7 miles of ways would detract from opportunities for solitude and primitive recreation.	Wilderness designation would preserve wilderness values of naturalness, opportunities for solitude and primitive recreation, and special features.
Impacts on Livestock Management	Effects would be the same as for the All Wilderness Alternative.	Livestock grazing would not be adversely affected because management type access would continue as at present.	Restrictions could inconvenience live-stock operators. Management costs and sheep losses to predators could increase slightly.

HOWELL PEAK WILDERNESS STUDY AREA

Appendix
 Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 17 S., R. 14 W., Sec. 36	640.00		State	Nb	Exchange		\$2,000
T. 18 S., R. 14 W., Sec. 2	639.30		State	Nb	Exchange		\$2,000

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

Conger Mountain WSA



CONGER MOUNTAIN WSA

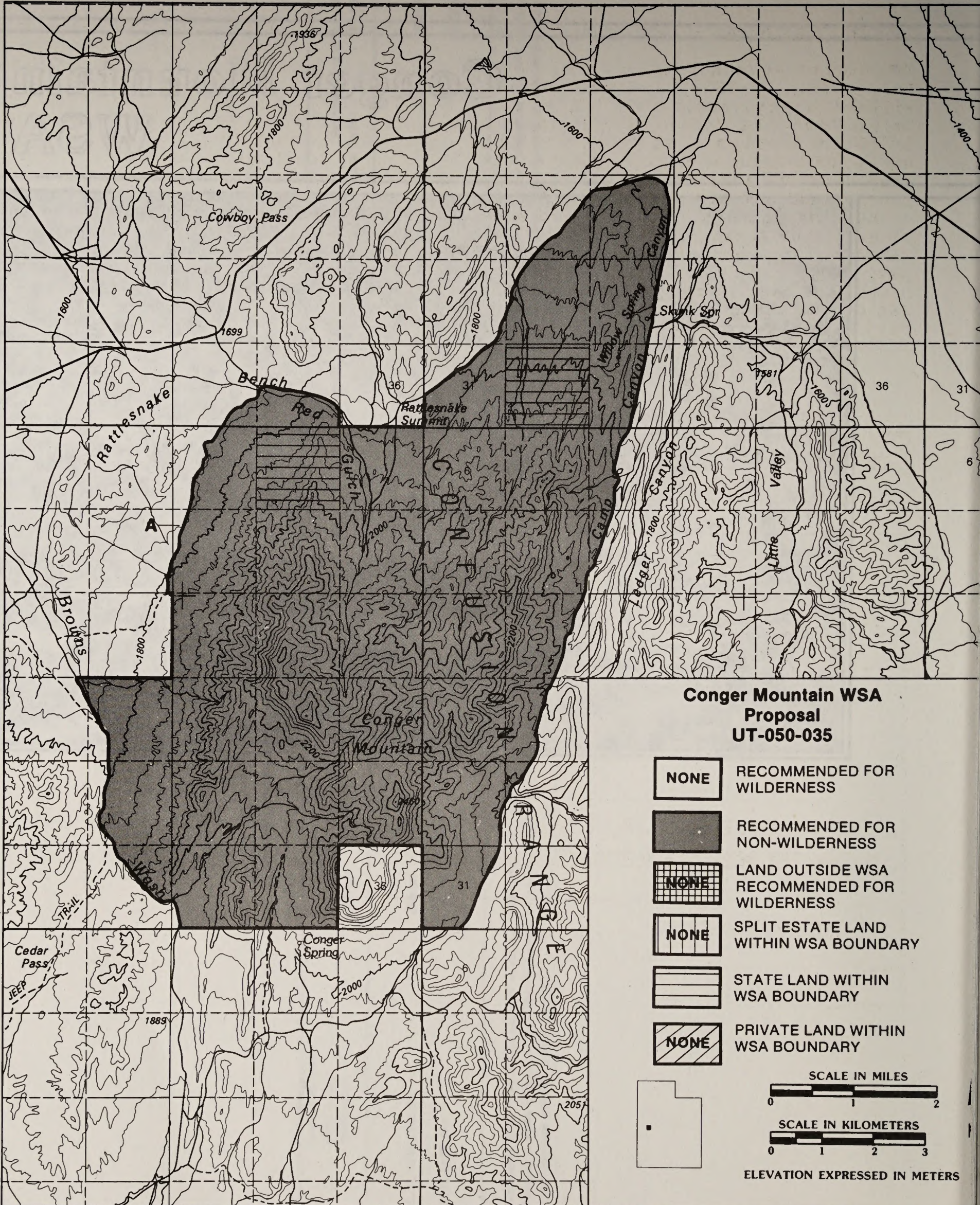
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R. 16 W.

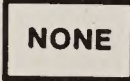


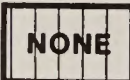
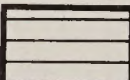
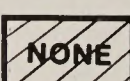
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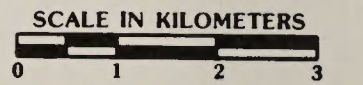
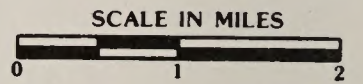
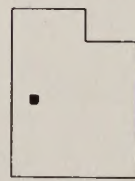
T. 18 S.

T. 19 S.



Conger Mountain WSA Proposal UT-050-035

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS

CONGER MOUNTAIN WILDERNESS STUDY AREA

1. THE STUDY AREA: 20,400 acres

The Conger Mountain Wilderness Study Area (WSA) (UT-050-035) is in western Millard County, about 50 miles west of Delta, Utah (population 1,930). The WSA is about 9 miles long from north to south and 6 miles wide from east to west (see Map). It includes 20,400 acres of public land administered by the Bureau of Land Management (BLM) and two sections (1,280 acres) of State lands (see Table 1). Improved and unimproved roads partly delimit the WSA on the west, north, and east. Section lines bound the WSA on the south end. The Conger Mountain WSA is surrounded mostly by public lands.

The study area is in the western portion of the north-south trending Confusion Range. The study area consists of low peaks and ledges. Foothills are relatively absent. Elevations range from about 5,200 feet at the edges of the WSA to Conger Mountain (8,070 feet). Pinyon-juniper woodland is the dominant vegetation type.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	20,400
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	1,280
Total	21,680
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	20,400
Split-Estate	0
Total BLM land not recommended for wilderness	20,400
In-holdings (State, Private)	1,280

Source: BLM File Data

CONGER MOUNTAIN WILDERNESS STUDY AREA

Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative, which is the recommendation in this report; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 0 acres
(recommended for wilderness)
- 20,400 acres
(recommended for nonwilderness)

The recommendation for this WSA is to release all of the area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner in which would utilize all practical means to avoid or minimize adverse environmental impacts.

All of the WSA is natural and about 70 percent provides outstanding opportunities for solitude, but opportunities for primitive recreation are not outstanding and the area is not particularly scenic. The Conger Mountain WSA does not include unusual wilderness characteristics or qualities of high enough value to outweigh other uses or warrant special protection. The special features in the WSA are not unique in this part of Utah. About 60 wild horses are in the WSA, but these animals can be managed and protected without wilderness designation. Although nonwilderness resources in the WSA are not particularly significant, they at least equal or surpass in importance the limited wilderness values. Recreational use is minor, but about 130 annual visitor days of recreational use in the WSA are attributable to vehicular use, whereas only 33 visitor days are for primitive recreation.

3. CRITERIA USED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man ex-

hibit no cumulative impact that is substantially noticeable. Essentially all of the WSA meets the naturalness criteria of the Wilderness Act. Approximately 5 miles of ways within the WSA are substantially unnoticeable. The WSA appears as unaltered limestone outcrops and rolling hills with dark green patches of juniper and scattered pinyon trees.

B. Solitude

About 14,280 acres (70 percent of the WSA) meet the Wilderness Act standards for solitude, or seclusion from other people.

Variations in terrain provide opportunities for solitude; more than a dozen small canyons shield hikers from sights and sounds of other visitors. Vegetation is generally too sparse to provide screening from distracting outside sights and sounds. About 6,120 acres (30 percent of the WSA) lack outstanding opportunities for solitude because of relatively flat topography and sparse vegetation.

The Conger Mountain WSA is in the South Range of the U.S. Air Force (USAF) Utah Test and Training Range (UTTR), one of the country's busiest military air spaces. From 100 to 150 daily flights, 6 days a week, are made in the UTTR. Some flights are as low as 100 feet about ground level. The WSA is within the area of heaviest use, and aircraft occasionally fly directly over the WSA. Most of these overflights are subsonic and are not directly over the WSA, but they can be an annoyance that detracts from but does not eliminate overall opportunities for solitude.

C. Primitive and Unconfined Recreation

The quality of recreational opportunities overall and for primitive recreation in particular are ordinary and do not meet the Wilderness Act standards.

D. Special Features

A herd of 60 wild horses roam the WSA. While wild horses are not unique in the western United States, they are of considerable interest to the average visitor. BLM management plans are to maintain the herd at or near 60 head.

CONGER MOUNTAIN WILDERNESS STUDY AREA

Candidate threatened or endangered species, which may inhabit the WSA include the ferruginous hawk, Swainson's hawk, long-billed curlew, western snowy plover, white-faced ibis, and Swasey Spring pocket gopher. These birds frequent areas throughout the Great Basin and western United States. Bald eagles and peregrine falcons, both of which are listed as endangered species, and golden eagles, a BLM sensitive species, inhabit the WSA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS, but it would add an ecosystem (saltbush-greasewood) not represented in the NWPS in Utah. PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV ecosystems in the WSA are juniper-pinyon woodland (14,688 acres) and saltbush-greasewood (5,712 acres). Both ecosystems are represented in the NWPS outside of Utah and in BLM study areas in Utah and other states. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

A Conger Mountain Wilderness would not contribute significantly to balancing the geographic distribution of areas in the western central United States within the NWPS. Inclusion of the Conger Mountain WSA could, however, contribute to balancing the NWPS in the Great Basin.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,139,219
Saltbush-Greasewood	3	45,553	37	1,025,895
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	244,745
Saltbush-Greasewood	0	0	7	141,133

Source: BLM File Data.

CONGER MOUNTAIN WILDERNESS STUDY AREA

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	10	1,079,807	78	2,239,275
Provo-Orem, Utah	11	708,638	90	2,766,468
Las Vegas, Nevada	38	3,132,130	54	2,134,358

Source: BLM File Data.

Within 100 miles of the WSA in a clockwise direction beginning to the northeast, are the 25,500-acre Deseret Peak Wilderness, the 28,000-acre Mt. Nebo Wilderness, and, to the northwest, the 64,677-acre Jarbridge Wilderness. All are in National Forests. As of January 1987, the NWPS included 23 areas comprising 4,868,316 acres in Utah and Nevada and Idaho, the adjacent states nearest the WSA. No wilderness areas have been designated to the north, west, or south in the vicinity of the WSA. Only six wilderness areas totalling 272,994 acres, are in the Great Basin. Only three wilderness areas in the NWPS have the same combination of PNV types as the Conger Mountain WSA would have (see "Expanding the Diversity of Natural Systems . . ."). All three are in California.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The area could be managed as wilderness. There are no oil and gas leases or mining claims in the WSA. There are two State-owned sections (1,280 acres) located along the northern boundary of the WSA. Major developments on these sections and related access and activity would probably not reduce the overall quality of wilderness values in the wilderness. Additionally, the potential for development is low in the foreseeable future. There are two USAF High Accuracy Multiple Object Tracking Stations (HAMOTS) in the WSA. These are portable units determined to be non-impairing to wilderness values. They were allowed in the WSA with the stipulation that they be removed if the area

were designated as wilderness. Therefore, they are not a manageability problem.

Eighty percent of the relatively light recreational use is, or is based on, off-road vehicle (ORV) use. Although the potential for mineral exploration and development is low and ORV use could be constrained by closure of existing ways, the lack of outstanding wilderness and scenic values in the WSA does not warrant the management actions that would have to be taken to preserve the area as wilderness. Wild horses and threatened or endangered species in the WSA can be protected through implementation of existing laws and management prescriptions.

Energy and Mineral Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area. According to BLM geologists, the geology is favorable for small deposits of beryllium, tungsten, lead, and zinc, and for small reservoirs of oil and natural gas. The degree of certainty that such mineral resources exist in the WSA is low, however, no exploration for mineral or energy resources has been conducted in the WSA.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives including designation of the entire area as wilderness.

CONGER MOUNTAIN WILDERNESS STUDY AREA

Local Social and Economic Considerations

Social and economic factors concerning this WSA were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 33 inputs specifically addressing this WSA were received from 40 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 20 commenters supported the wilderness designation for part or all of the WSA, while 14 commenters were opposed. Six commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness did not provide a consensus regarding features in the WSA that should be preserved or any special concerns. The majority of those commenting in favor of wilderness were from outside of Utah.

Those opposing wilderness were concerned that wilderness designation would preclude mineral exploration and development. The majority of these commenters (9) were from rural Utah, and were local to the area. Four were from outside of Utah.

Two Federal agencies, the USAF and the USBM, commented on the Draft EIS for this WSA. The Federal agencies did not take a position regarding designation or nondesignation of the WSA. The USAF noted that low altitude flights will continue over the WSA with or without

wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level. The USAF also commented on the presence of and need for HAMOTS and other communication facilities in the WSA and on other public lands in the UTTR. It is the USAF's position that these facilities in their current location and other locations in the future are critical to the success of advanced defense testing at the UTTR and that BLM must allow these communication facilities to remain in place following wilderness designation. This would not be possible under BLM's current Wilderness Management Policy.

The USBM commented that BLM's Draft EIS had understated the petroleum potential of the WSA.

No comment letters were received on the Final EIS.

There are two State sections (1,280 acres) in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the Conger Mountain WSA appears to lack outstanding wilderness qualities, although it could contribute to diversity of wilderness areas. The State also noted that there are apparent conflicts with livestock operations. Specific State comments on the Draft EIS dealt with errors in the wording regarding exchange of State lands adjacent to the WSA, the proper name of the antelope herd unit in and around the WSA, the presence of historic ranches in the vicinity of the WSA, and potential installation of a USAF communication facility on State land near the WSA.

The Millard County Master Plan does not specifically address wilderness. The Millard County Commission favors protection of natural and esthetic resources on public lands as well as multiple use and believes that these objectives can be met without wilderness designation. The Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation for BLM lands in Utah.

CONGER MOUNTAIN WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives	
Issue Topics	Recommendation No Action/No Wilderness All Wilderness (20,400 Acres)
Impacts on Wilderness Values	Wilderness values of naturalness, opportunities for solitude and primitive recreation, and special features would be preserved.
Impacts on Mineral and Energy Exploration and Development	Wilderness values would not be protected by the proposed action and loss would occur as intrusions increase. In the foreseeable future, wilderness values would be directly lost on 20 acres and indirectly reduced in quality on up to 3,060 acres of the WSA due to mineral exploration. Continued vehicular use would detract from opportunities for solitude and primitive recreation. Special features would not be significantly affected.
Impacts on Livestock Management	Exploration opportunities for potential oil and gas would be lost or severely constrained. The potential for production in the foreseeable future is low, however, and wilderness designation would not result in a significant loss.
Impacts on Air Force Operations	Restrictions on vehicular use and predator control would inconvenience livestock permittees. Management costs would increase. Removal of two HAMOTS stations would require alternate sites and redesigning of the Air Force tracking system grid.

Notch Peak
WSA



NOTCH PEAK WSA

R. 14 W.

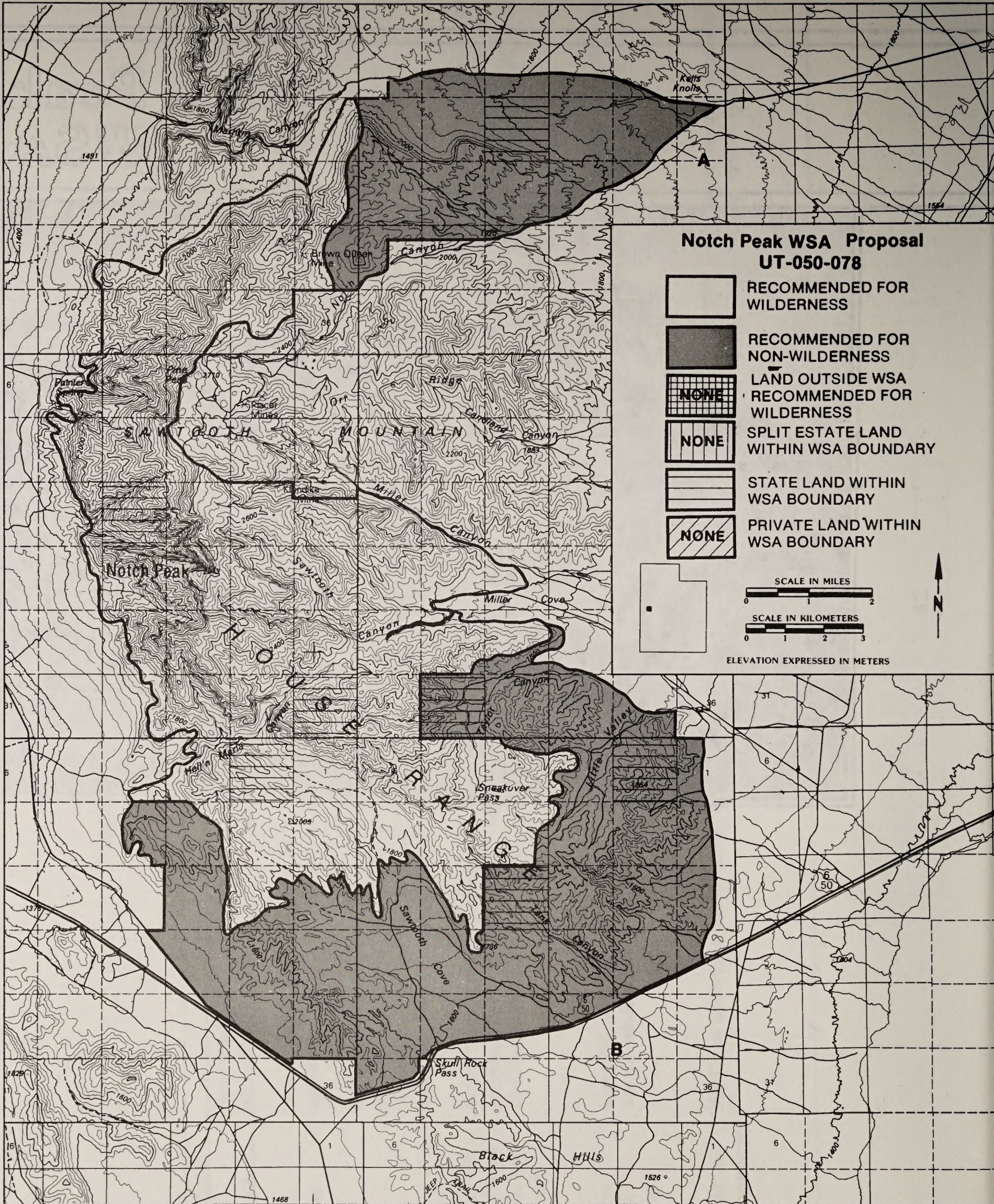
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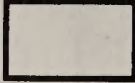


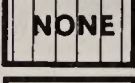
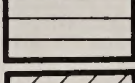
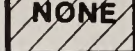
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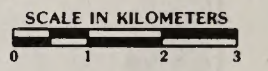
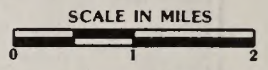
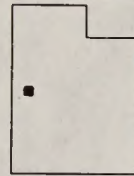
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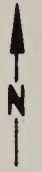


Notch Peak WSA Proposal UT-050-078

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS



NOTCH PEAK WILDERNESS STUDY AREA

1. THE STUDY AREA: 51,130 acres

The Notch Peak Wilderness Study Area (WSA) (UT-050-078) is in the House Range, in western Millard County, about 45 miles west of Delta, Utah (population 1,930). The study area is shaped somewhat like the letter "C", and is about 15 miles from north to south and 9 miles from east to west in the southern portion (see Map). It includes 51,130 acres of public land administered by the Bureau of Land Management (BLM) and seven sections (4,479 acres) of State land (see Table 1). Improved and unimproved roads partly delimit the WSA on the northern, southern, and a major portion of the eastern sides.

The western boundary is generally at the base of the steep slopes, following the 6,200 foot contour line on the northern third and the 5,600 foot contour line on most of the remaining portion to the south. The King Top WSA (UT-050-070) is directly to the southwest, separated from this WSA by U.S. Highway 50 and 6. The Howell Peak WSA (UT-050-077) is directly to the North separated from this WSA by a county road. The Notch Peak WSA is surrounded mostly by public lands.

Notch Peak is a distinct landmark in west-central Utah, and is visible for 70 miles.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA***

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	51,130
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	4,479
Total	55,609
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	28,000
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	28,000
In-holdings (State, private)	1,922
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	23,130
Split-Estate	0
Total BLM land not recommended for wilderness	23,130
In-holdings (State, Private)	2,557

Source: BLM File Data.

* The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

NOTCH PEAK WILDERNESS STUDY AREA

A precipice almost 3,000 feet high on the west side of the peak has a shallow groove at the top, giving the mountain its name. Elevations range from around 6,000 feet at the edges of the WSA to Notch Peak, 9,655 feet. Brush is the dominant vegetation at lower elevations, with pinyon-juniper woodland at higher elevations. Conifer forests occupy many of the eastern and northern slopes at the highest elevations. The peak also support isolated patches of aspen. About 9,000 acres of the WSA are in an Area of Critical Environmental Concern (ACEC) and will be nominated as a National Natural Landmark.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Four alternatives were analyzed in the EIS: a partial wilderness alternative, where 28,000 acres would be designated as wilderness and 23,130 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; an all wilderness alternative; and a smaller partial wilderness alternative of 9,000 acres.

2. RECOMMENDATION AND RATIONALE:

- 28,000 acres
(recommended for wilderness)
- 23,130 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 28,000 acres as wilderness and to release the remaining 23,130 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts. This recommendation for wilderness will further apply to any additional in-holding acreage acquired through purchase or exchange with willing owners. The Appendix lists all in-holdings and provides information on acquisition.

The recommended portion of the WSA is the central, highest and most mountainous part of the WSA, and includes the best wilderness values in the WSA. All of the area recommended for wilderness designation is natural and has outstanding opportunities for solitude and primitive recreation. Notch Peak rises vertically almost 3,000 feet and is one of the highest cliffs in North America readily identifiable from over 70 miles away. In addition to the scenic grandeur it provides, the area also supports rare plants, a stand of ancient bristlecone pine, and habitat for birds of prey. Wildlife include mule deer, cougar, coyote, badger, chucker and a variety of raptors. All of the ACEC is in the area recommended for wilderness. Eleven percent of the recommended area has outstanding visual quality. Little or no conflict exists with other uses.

The portion of the WSA that is not recommended for wilderness designation (Areas A and B) is mostly sparsely vegetated foothills that lack high quality scenic values and outstanding opportunities for solitude and primitive recreation. Nearby mining activities and road traffic detract from solitude in the northern part of the area, which is not being recommended for wilderness. Wilderness designation of this portion of the WSA could impose constraints on access for livestock management. BLM considers other resource values and uses to be more significant than the relatively minimal wilderness values.

3. CRITERIA USED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Essentially all of the WSA meets the naturalness criteria of the Wilderness Act. Approximately 20 miles of ways at lower elevations in the eastern and southern portions of the WSA and a small cabin and mine workings in the Sawtooth Canyon area are substantially unnoticeable. The

NOTCH PEAK WILDERNESS STUDY AREA

sheer cliffs on the western side of the WSA appear impenetrable as well as untouched. The high elevation eastern slopes are covered with unscarred stands of conifer and lightly colored aspen groves.

B. Solitude

About 28,000 acres, including all of the area proposed for wilderness designation, meet the Wilderness Act standards for solitude. This area includes the interior, mountainous portion around Notch Peak and Sawtooth and Hell'n Maria Canyons.

The Notch Peak WSA is in the South range of the U.S. Air Force (USAF) Utah Test and Training Range (UTTR), one of the country's busiest military air spaces. From 100 to 150 daily flights, 6 days a week, are made in the UTTR. Some flights are as low as 100 feet above ground level. The WSA is within the area of heaviest use, and aircraft occasionally fly directly over the WSA. Although most of these overflights are subsonic and few are directly over the WSA, they can be an annoyance that detracts from but generally do not eliminate overall opportunities for solitude.

About 23,130 acres in the WSA, including the benchlands not recommended for wilderness designation, do not meet the standards for solitude. The terrain and low vegetation do not provide for seclusion. Sights and sounds on U.S. Highway 50 and 6, along the WSA's southern boundary, vehicular traffic on ways, and the mining activity in Amasa Valley, also detract from solitude.

C. Primitive and Unconfined Recreation

All of the portion recommended for wilderness designation, 28,000 acres, provides outstanding opportunities for primitive and unconfined recreation. In the higher parts of the WSA, including Notch Peak, opportunities for hiking are outstanding due to challenging terrain and spectacular views.

Approximately 23,130 acres (45 percent of the WSA) in the foothills in the northern and southern portions of the WSA do not meet the standards for primitive and unconfined recreation because

of the lack of variety in terrain and vegetation.

D. Special Features

Candidate threatened or endangered species, that could inhabit the WSA include the ferruginous hawk, Swainson's hawk, long-billed curlew, western snowy plover, and white-faced ibis.

Bald eagles and peregrine falcons, both listed as endangered species, and golden eagles, a BLM sensitive species, inhabit the WSA.

One sensitive plant species, which has not yet been listed as threatened or endangered, and one plant species which is a candidate to be listed, Eriogonum ammophillum and Cryptantha compacta, respectively, may occur in the WSA.

Bristlecone pine grows on some of the higher ridges in the WSA. Some of these pines have recently been aged at in excess of 2,000 years old. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS, but it would add an ecosystem (saltbush-greasewood) not represented in the NWPS in Utah.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV ecosystems in the WSA are juniper-pinyon woodland (20,452 acres) and saltbush-greasewood (30,678 acres). Both ecosystems are represented in the NWPS

NOTCH PEAK WILDERNESS STUDY AREA

outside of Utah and in BLM study areas in Utah and other states. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada standard metropolitan statistical areas.

Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

A Notch Peak wilderness would not contribute significantly to balancing the geographic distribution of areas within the NWPS. As of January 1987, the NWPS included 23 areas comprising 4,868,316 acres in Utah and (Nevada and Idaho) the adjacent states nearest the WSA.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,133,455
Saltbush-Greasewood	3	45,553	37	1,000,929
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	238,981
Saltbush-Greasewood	0	0	7	116,167

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	10	1,079,807	78	2,239,275
Provo-Orem, Utah	11	708,638	90	2,766,468
Las Vegas, Nevada	38	3,132,130	54	2,134,358

Source: BLM File Data.

It would, however, supplement the distribution of wilderness in the Great Basin.

In a clockwise direction within 100 miles of the WSA, beginning to the northeast, are the 25,500-acre Deseret

NOTCH PEAK WILDERNESS STUDY AREA

Peak Wilderness, the 28,000-acre Mt. Nebo Wilderness, and, to the south, the 7,000-acre Ashdown Gorge Wilderness. All three are in National Forests. No wilderness areas have been designated west or south in the vicinity of the WSA, however. Only six wilderness areas, totaling 272,994 acres, are in the Great Basin.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be managed as wilderness to preserve values now present in the area. Resource and land conflicts are not now a problem in the WSA and are not anticipated to be in the future.

There are two post-FLPMA oil and gas leases (450 acres) in the portion of the WSA recommended as wilderness. They are subject to the nonimpairment stipulation and can be managed to protect wilderness values. One hundred and seventy-nine of the 207 mining claims in the WSA are in the area recommended for wilderness, but development is not projected in the foreseeable future and they are not expected to be a manageability problem.

There are three State-owned sections (1,922 acres) in the recommended area. Major developments on these sections and related access and activity would reduce the quality of wilderness values, mainly in the southern portion of the wilderness, but the potential for development is low.

Current recreational use of about 250 annual visitor days is relatively low and is mostly or entirely nonvehicular and dispersed. Wilderness designation would not affect this pattern, as most of the terrain is too rough to encourage vehicular recreational use. Livestock grazing could continue as at present, requiring little or no change in management.

The USAF has stated that military flights will continue in the vicinity of the WSA, whether it is designated or not. Overflights would detract from solitude, and management could not mitigate such disturbance. This conflict can be

resolved only at the Congressional level.

The area not recommended for wilderness designation could be managed as wilderness, although it would be more difficult to do so.

There are one oil and gas lease (1,640 acres), 28 mining claims, and four State-owned sections in this portion of the WSA, but developments that would reduce the quality of wilderness values are not projected.

BLM has concluded that nonwilderness uses and resources could be managed in a manner that would not degrade the relatively sparse wilderness values in the 23,130 acres not recommended for wilderness designation.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Notch Peak WSA (USGS Bulletin 1749-C, Douglas B. Stoesser, et al., 1989). The investigation included 28,000 acres of the WSA, which is the portion of the study area that is recommended for wilderness designation. According to the report, the northern part of the study area includes part of the Notch Peak mining district, which has produced tungsten from mines within and near the study area. Mining within the district, but outside the study area, included gold placer mining. A resource of 775 short tons, which averages 0.47 percent tungsten trioxide was defined at the Brown Queen mine in the northern part of the study area. Limestone and sand and gravel occur within the study area. For the purposes of assessing mineral resource potential the study area was divided into five subareas: the granite (Notch Peak intrusive), the metamorphic contact zone of the granite, the area north of the contact zone, the area south of the contact zone, and a small drainage in the southwestern part of the study area. The Notch Peak intrusive has moderate mineral resource potential for undiscovered molybdenum, gold, copper, uranium, and thorium, and low mineral resource potential for undiscovered tungsten, silver, lead, and zinc. The metamorphic contact zone of the granite

NOTCH PEAK WILDERNESS STUDY AREA

has high mineral resource potential for undiscovered tungsten, and moderate mineral resource potential for undiscovered molybdenum, gold, silver, copper, lead, zinc, uranium, and thorium. The area to the north of the contact zone of the granite has moderate mineral resource potential for undiscovered tungsten, molybdenum, gold, silver, copper, lead, and zinc, and low mineral resource potential for undiscovered uranium and thorium. The area to the south of the contact zone of the granite has low mineral resource potential for undiscovered tungsten, molybdenum, gold, silver, copper, lead, uranium, and thorium. The area underlying a small drainage in the southwestern part of the study area has moderate mineral resource potential for undiscovered tungsten and molybdenum, and low mineral resource potential for undiscovered gold, silver, copper, lead, zinc, uranium, and thorium. The entire study area has moderate resource for undiscovered oil and gas. The entire study area has low resource potential for all other metals, coal, and geothermal energy.

According to BLM geologists, the geology of the WSA is also favorable for beryllium. Thermal springs discharge northwest of the WSA, and the WSA is believed to be marginally favorable for low temperature geothermal resources with a high degree of certainty that this potential energy source exists. Geothermal resources would be uneconomical to extract. Seismic surveys and drilling have been done near the WSA. The occurrence of large oil and gas deposits is unlikely, but small deposits may exist. They would be most likely to occur along the eastern margin of the WSA.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives including designation of the entire area as wilderness.

Local Social and Economic Considerations

Social and economic factors concerning this WSA were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 59 inputs specifically addressing this WSA were received from 71 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 57 commenters supported wilderness designation for part or all of the WSA, while 10 commenters were opposed. Four commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features present in the WSA and opportunities for primitive recreation. The majority of those commenting in favor of wilderness were from urban areas in Utah. Of particular concern was the need to protect wilderness values.

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development and be harmful to State and local economy. Four of the commenters were from rural Utah, two from urban Utah, and four were from outside the State.

Two Federal agencies, the USAF and the USBM commented on the Draft EIS for this WSA. The Federal agencies did not take a position regarding designation or non-designation of the WSA. The USAF noted that low altitude flights will continue over the WSA with or without wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level.

NOTCH PEAK WILDERNESS STUDY AREA

The USBM noted that BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. These findings have been incorporated into the Final EIS and study report. The USBM also commented that BLM had understated the petroleum potential of the WSA.

No comment letters were received on the Final EIS.

There are seven State sections (4,479 acres) in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the Notch Peak WSA possesses both high wilderness values and a high degree of conflicts compared to other WSAs in the region. The State noted that the partial wilderness alternative would exclude areas of low wilderness quality which are probably unmanageable as wilderness and would minimize potential conflicts with mineral and livestock interests. Specific State comments on the Draft EIS dealt with inadequacies of the geology discussion, underrating of the favorability for minerals, and the presence of a rare plant species in the WSA.

The Millard County Master Plan does not specifically address wilderness. The Millard County Commission favors protection of natural and esthetic resources on public lands as well as multiple use and believes that these objectives can be met without wilderness designation. The Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation for BLM lands in Utah.

NOTCH PEAK WSA

Table 4
Comparative Summary of Impacts by Alternative

Issue Topics	Alternatives			
	Recommendation Large Partial Wilderness (28,000 Acres)	No Action/No Wilderness	All Wilderness (51,130 Acres)	Small Partial Wilderness (9,000 Acres)
Impacts on Wilderness Values	Wilderness values would be preserved in the designated area which is about 55 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 1 acre of the WSA due to guzzler development from which wildlife special features would benefit. Continued vehicular use of about 13 miles from opportunities for solitude and primitive recreation. Special features would be preserved.	Wilderness values would not be protected by wilderness designation. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 1 acre of the WSA due to guzzler development from which wildlife special features would benefit. Special features would not be adversely affected. Continued vehicular use of about 20 miles of ways would detract from opportunities for solitude and primitive recreation.	Wilderness values would be preserved. Naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 1 acre of the WSA due to guzzler development from which wildlife special features would benefit.	Wilderness values would be preserved in the designated area which is about 18 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 1 acre of the WSA due to guzzler development from which wildlife special features would benefit. Vehicular use of about 20 miles of ways would detract from opportunities for solitude and primitive recreation in the non-designated area. Special features would be preserved.

NOTCH PEAK WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topics	Alternatives			
	Recommendation Large Partial Wilderness (28,000 Acres)	No Action/No Wilderness	All Wilderness (51,130 Acres)	Small Partial Wilderness (9,000 Acres)
Impacts on Livestock Management	Effects would be the same as for the All Wilderness Alternative.	Livestock grazing would not be adversely affected because management and access would continue as at present.	Vehicular restrictions could inconvenience livestock operators in the area. Management costs and sheep losses due to predators could increase.	Livestock grazing would not be affected because 91 percent of the forage, the existing developments, and all 20 miles of ways would be in the non-designated area.
Impacts on Recreation	Opportunities for primitive recreation would be preserved in the designated area. Opportunities for vehicular access while hunting and sightseeing would be lost on 7 miles of ways. Overall, recreational use would increase. The quality of the primitive recreation would decrease for some users as vehicle use increases.	Primitive recreational opportunities would not be protected. Opportunities for vehicular recreation on 20 miles of ways would continue. Overall, recreational use would increase. The quality of the primitive recreation would decrease for some users as vehicle use increases.	Opportunities for primitive recreation would be preserved throughout the WSA. Vehicular recreational opportunities would be lost on 20 miles of ways. Primitive recreational use would increase, but overall recreational use would decrease initially.	Opportunities for primitive recreational use would be preserved in the designated area. Opportunities for vehicular use of 20 miles of ways in the non-designated area would not be affected. Recreational use overall would increase. The quality of the primitive recreation experience would decrease as vehicle use increases.

NOTCH PEAK WILDERNESS STUDY AREA

Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 19 S., R. 14 W., Sec. 16	640.00		State	No	Exchange		\$2,000
T. 19 S., R. 14 W., Sec. 36	640.00		State	No	Exchange		\$2,000
T. 20 S., R. 14 W., Sec. 2	642.00		State	No	Exchange		\$2,000

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

King Top WSA

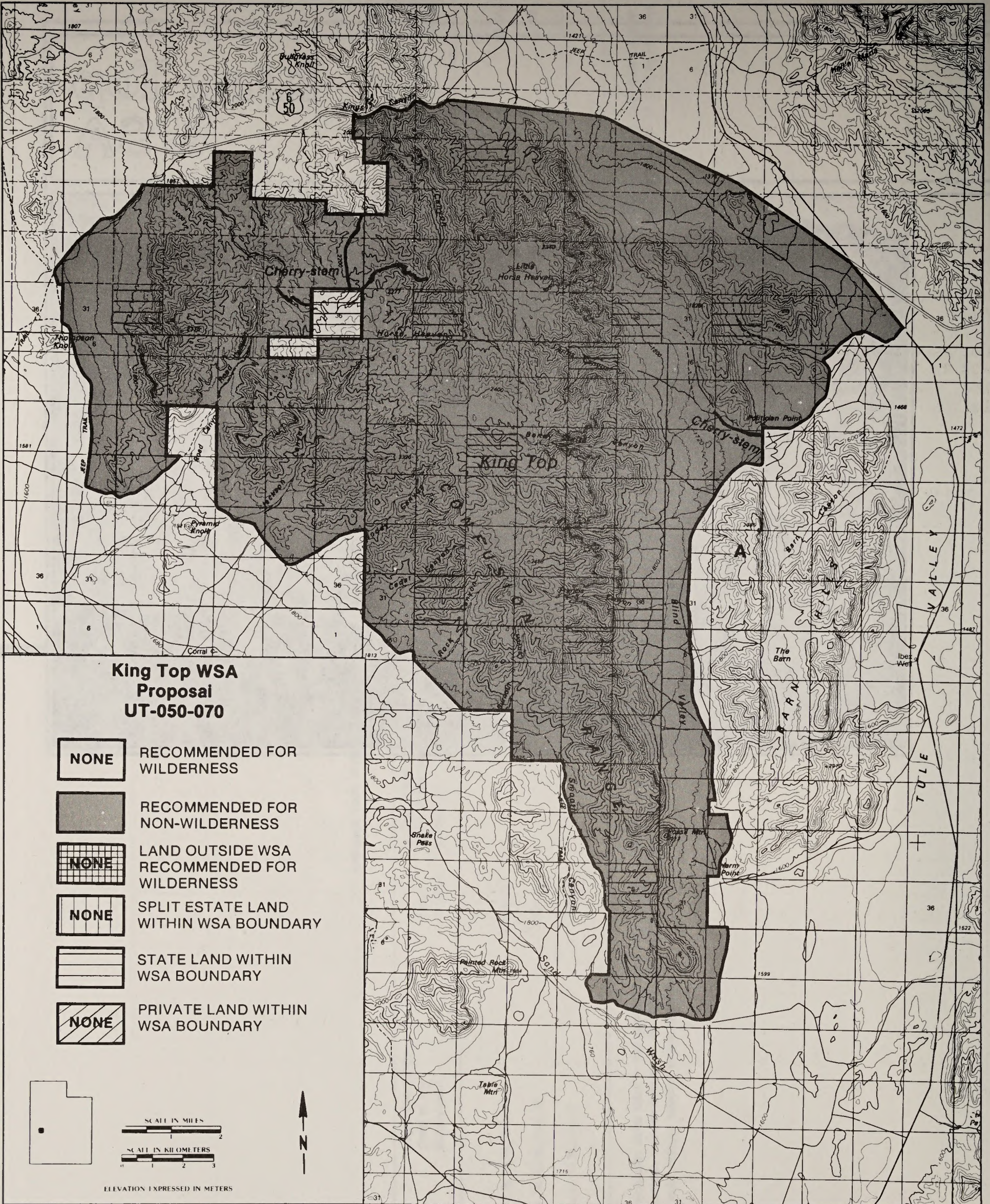


KING TOP WSA

R. 16 W.

R. 15 W.

R. 14 W.



T. 20

T. 21

T. 22 S

T. 23 S

KING TOP WILDERNESS STUDY AREA

1. THE STUDY AREA: 84,770 acres

The King Top Wilderness Study Area (WSA) (UT-050-070) is in the Confusion Range, in southwestern Millard County, about 50 miles southwest of Delta, Utah (population 1,930). The WSA is umbrella-shaped, and is about 19 miles from north to south and 17 miles at the widest, from east to west (see Map). It includes 84,770 acres of public land administered by the Bureau of Land Management (BLM) and 6,661 acres of State land (see Table 1). The WSA is the largest WSA in western Utah. Improved and unimproved roads delimit the WSA on all sides. The Notch Peak WSA (UT-050-078) is directly to the northeast, separated from the King Top WSA by U.S. Highways 50 and 6. The King Top WSA is surrounded mostly by public lands.

Like most other mountain ranges in the Great Basin, the Confusion Range rises abruptly above the surrounding desert valleys. The Range differs from other Great Basin ranges, however, in that the summit portion is almost a plateau, a hilly upland with the steepest slopes on the eastern side. Elevations range from 5,000 feet at the edges of the WSA to more than 8,000 feet. Desert shrub predominates at lower elevations and pinyon-juniper woodland is dominant on the King Top plateau.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS), finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

	ACRES
BLM (surface and subsurface)	84,770
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	6,661
Total	91,431
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	84,770
Split-Estate	0
Total BLM land not recommended for wilderness	84,770
In-holdings (State, Private)	6,661

Source: BLM File Data

KING TOP WILDERNESS STUDY AREA

Three alternatives were analyzed in the EIS: a no wilderness (no action) alternative which is the recommendation in this report, a partial wilderness alternative where 53,044 acres would be designated as wilderness and 31,726 acres would be released for uses other than wilderness, and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

0 acres

(recommended for wilderness)

84,770 acres

(recommended for nonwilderness)

The recommendation for this WSA is to release all of the area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

Inclusion of the WSA in the National Wilderness Preservation System (NWPS) could add a potential ecosystem not presently represented (see "Expanding the Diversity of Natural Systems . . ."). Other wilderness values in the WSA are not exceptional. The WSA has moderate potential for discovery of oil and gas resources and includes 11 sections of State land to which access would have to be allowed. All of these sections are leased for livestock grazing and at least four are leased for minerals. About 44 percent of the WSA is now under post-FLPMA mining claim and proprietary company data (reviewed by BLM and the U.S. Geological Survey [USGS] geologists in 1991) indicate that there is a high potential for the existence of valid claims on BLM lands and a need for additional access to State lands at least in the northwestern part of the WSA. Reasonable access to in-held lands cannot be denied.

Although all of the WSA is essentially natural, 30 miles of ways penetrate the area. Opportunities for solitude meet Wilderness Act standards on 50,000 acres (59 percent of the area) but, except for fossil collecting at one locality in the

WSA, opportunities for primitive recreation are less than outstanding throughout the WSA. None of the scenery is exceptional. No distinctive or unique features are present. All of the special features in the WSA, including bald and golden eagles, candidate or sensitive species, wild horses, and fossils can be managed and protected without wilderness designation.

BLM believes that nonwilderness values outweigh the relatively few wilderness values of any significant quality which could merit recommending wilderness designation.

About 1,920 acres surrounding Fossil Mountain would continue to be protected under the existing designation of Historic Site/Area of Critical Environmental Concern (ACEC).

3. CRITERIA USED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Essentially all of the WSA meets the naturalness criteria of the Wilderness Act. The area is comprised of a combination of unaltered sheer tan and gray cliffs; light tan low rolling foothills with scattered juniper trees; and a large plateau with dark patches of pinyon and juniper trees. Approximately 30 miles of ways in the WSA are substantially unnoticeable. In 1981, uranium exploration activities included 26 drill sites and 5 miles of road in the southeast corner of the WSA. Together with an 8 mile long road constructed to a State section near the center of the WSA, about 20 acres were disturbed. All disturbance is being rehabilitated. A road to a microwave site in the northern part of the WSA has been cherry-stemmed and is excluded from the WSA.

KING TOP WILDERNESS STUDY AREA

B. Solitude

About 50,000 acres (59 percent of the WSA) in the more rugged and more densely vegetated central part of the study area meet the Wilderness Act standards for solitude. The remainder of the WSA is only sparsely covered by low-growing plants, is relatively flat, and does not meet the standards for outstanding solitude. The King Top WSA is in the South range of the U.S. Air Force (USAF) Utah Test and Training Range (UTTR), one of the country's busiest military air spaces. From 100 to 150 daily flights, 6 days a week, are made in the UTTR. Some flights are as low as 100 feet above ground level. The WSA is in the southern part of the UTTR, which is used somewhat less than the northern portion, but aircraft occasionally fly directly over the WSA. Although these overflights are subsonic, they can be an annoyance that detracts from but does not eliminate overall opportunities for solitude.

C. Primitive and Unconfined Recreation

Wilderness Act standards for opportunities for primitive and unconfined recreation are substantially not met in the King Top WSA, with the exception of fossil collecting at Fossil Mountain, near the southeastern edge of the WSA, where 1,920 acres have been identified as an ACEC for lower Ordovician fossils.

D. Special Features

Bald eagles and peregrine falcons, both listed as endangered species, and golden eagles, a BLM sensitive species, inhabit the WSA. Candidate threatened or endangered species that may inhabit the WSA include the ferruginous hawk, Swainson's hawk, long-billed curlew, western snowy plover, and white-faced ibis. These birds frequent areas throughout the Great Basin and the western United States.

One plant species eligible for listing as threatened or endangered and one Category 2 candidate plant species which may become listed, Eriogonum amophilium and Cryptantha compacta, respectively, are also found in the WSA.

Fossil Mountain is one of the more important localities in the world for

early Ordovician fossils, and is frequently visited by paleontologists and amateur collectors.

A herd of 45 wild horses roams the WSA. While wild horses are not unique in the western United States, however, they are of considerable interest to the average visitor. Management plans are to maintain the herd at 30 head.

Diversity in the National Wilderness Preservation System

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would add a potential natural vegetation (PNV) ecosystem (spruce-fir-Douglas fir forest) not presently represented in the NWPS, and represented in other BLM WSAs only in the North Stansbury Mountains.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation currently in an area. The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV types in the WSA are juniper-pinyon woodland (33,908 acres) and spruce-fir-Douglas fir forest (50,862 acres). Juniper-pinyon woodland is not well represented in the NWPS but is widely represented in other WSAs.

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

A King Top wilderness would not contribute significantly to balancing the

KING TOP WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,119,999
Spruce-Fir-Douglas Fir Forest	0	0	1	700
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	12	225,525
Spruce-Fir-Douglas Fir Forest	0	0	1	700

Source: BLM File Data.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	10	1,079,807	78	2,239,275
Provo-Orem, Utah	11	708,638	90	2,766,468
Las Vegas, Nevada	38	3,132,130	54	2,134,358

Source: BLM File Data.

geographic distribution of areas within the NWPS in the central-western United States. Inclusion of the WSA in the NWPS could, however, contribute to balancing the NWPS in the Great Basin.

As of January 1987, the NWPS included 65 areas comprising 2,898,792 acres in Utah and (Nevada and Arizona) the adjacent states nearest the WSA. In a clockwise direction, within 100 miles of the WSA, beginning to the northeast, are the 25,500-acre Deseret Peak Wilderness, the 28,000-acre Mt. Nebo Wilderness, and to the south, the 7,000-acre Ashdown Gorge Wilderness, and the 50,000-acre Pine Valley Mountain Wilderness. All areas are in the National Forests.

Only six wilderness areas, comprising 272,994 acres, are within the Great

Basin. Considering as well that the WSA includes a PNV ecosystem not represented in the NWPS (see "Expanding the Diversity of Natural Systems . . ."), the King Top WSA could provide a contribution to the NWPS in the Great Basin.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The WSA may not be manageable as wilderness. The Warm Springs Resource Management Plan includes management prescriptions for the WSA that have as their objective feasible use and protection of resources in the WSA. This includes the 1,920-acre Fossil Mountain Historic Site ACEC, which is closed to surface occupancy for oil and gas leases to protect the fossil beds from damage.

KING TOP WILDERNESS STUDY AREA

There is one post-FLPMA oil and gas lease (800 acres) in the WSA. It is subject to the nonimpairment stipulation and can be managed to protect wilderness values. There are 43 mining claims in the WSA but development is not projected in the foreseeable future and they are not expected to be a manageability problem.

The USAF has stated that military flights will continue in the vicinity of the WSA, whether it is designated or not. Overflights would detract from solitude and BLM management could not mitigate such disturbance. This conflict can be resolved only at the Congressional level.

There are 11 State-owned sections (6,661 acres) scattered throughout the WSA. Major developments on these sections and related access and activity would reduce the quality of wilderness values throughout the WSA. Information provided by mining companies in February 1991 indicate that about 44 percent of the WSA is now under mining claim and that four of the in-held State sections are leased for minerals. According to their data, which has been substantiated by the USGS and BLM geologists, there will be a need for exploration access and possibly development on BLM and State lands in the WSA. The primary developments would be for disseminated gold.

Energy and Mineral Resource Values

Because the WSA is not recommended for wilderness designation, the USGS and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area. A geochemical survey conducted by the USGS found high anomalies of several elements that include: gold, silver, mercury, barium, copper, lead, and zinc. Two USGS reports done in 1989 and 1990 produced from the geochemical survey stated the possibility of a larger volume of mineralized rock in the subsurface or in adjacent areas. The western part of the WSA has been targeted by private industry for gold and silver exploration. To date, eleven holes have been drilled inside the WSA and eight holes have been drilled on cherrystems and in-held state sections, delineating commercial grades of gold and silver. More drill holes are being proposed for

the immediate future. According to BLM geologists, other small deposits of beryllium, lead, zinc, tungsten, and uranium may exist within the WSA, but the degree of certainty is very low. This assumption is based on the geology of the WSA.

Industry evaluations of the potential for oil and gas resources within the WSA indicate high favorability for the occurrence of oil and gas deposits. Several exploratory holes have been drilled but no shows were reported. Because of fairly favorable geologic structure and permeability, it has been concluded that small pools of oil or gas may exist.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives including designation of the entire area as wilderness.

Local Social and Economic Considerations

Social and economic factors concerning this WSA were not considered to be significant issues in the EIS. Recent exploration for disseminated gold has contributed a few jobs to the Millard County area and future mining activities could contribute additional job and tax base.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 96 inputs specifically addressing this WSA were received from 113 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

KING TOP WILDERNESS STUDY AREA

In general, 87 commenters supported wilderness designation for part or all of the WSA, while 20 commenters were opposed. Six commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features present in the WSA and the protection offered by wilderness designation. The majority of those commenting in favor of wilderness were from urban areas in Utah. Of particular concern was the need to protect special features, wildlife, and wildlife habitat.

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development; limit public access; and restrict weed, pest, and fire control. The majority of these commenters were from rural Utah, and were local to the area.

One Federal agency, the USAF, commented on the Draft EIS for this WSA. The USAF did not take a position regarding designation or nondesignation of the WSA but noted that low altitude flights will continue over the WSA with or without wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level.

No comment letters were received on the Final EIS.

There are 11 State sections (6,661 acres) in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the wilderness values for the King Top WSA are not considered high within the region and that some conflicts exist with livestock operations, minerals and energy resource potential and significant economic losses. The State recommended a 1,920-acre designation of Fossil Mountain as a historic site. Specific State comments on the Draft EIS dealt with inadequacies of the geology discussion, underrating of the favorability for min-

erals, and lack of information about the town of Ibex.

The Millard County Master Plan does not specifically address wilderness. The Millard County Commission favors protection of natural and esthetic resources on public lands as well as multiple use and believes that these objectives can be met without wilderness designation. The Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation for BLM lands in Utah.

KING TOP WSA

Table 4
Comparative Summary of Impacts by Alternative

Issue Topics	Alternatives		
	Recommendation No Action/No Wilderness	All Wilderness (84,770 Acres)	Partial Wilderness (53,044 Acres)
Impacts on Wilderness Values	Wilderness values would not be protected by wilderness designation. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 5 acres of the WSA due to development of guzzlers from which animal special features would detract from opportunities for solitude and primitive recreation. Special features would not be significantly affected.	Wilderness values would be preserved. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 5 acres of the WSA due to development of guzzlers from which animal special features would benefit. Closing all ways to vehicular use would enhance opportunities for solitude and primitive recreation.	Wilderness values would be preserved in the designated area which is about 63 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 5 acres of the WSA due to development of guzzlers from which animal special features would benefit. Special features would be preserved. Continued vehicular use of 24 miles of ways in the non-designated area would detract from opportunities for solitude and primitive recreation.
Impacts on Livestock Management	Livestock grazing would not be adversely affected because management and access would continue as at present.	Wilderness designation would result in restrictions on access and inconvenience to livestock permittees. Management costs and sheep losses to predators would increase.	Access for livestock management would not be significantly affected because only 6 of the 30 miles of ways in the WSA would be in the designated area. Sheep losses to predators would increase slightly.
Impacts on Recreation	Overall, recreational use would increase. The quality of primitive recreation would be reduced as vehicular use of 30 miles of ways increases.	Primitive recreational use would be preserved and would increase. Vehicle-oriented recreation would be eliminated, but the area is not an ORV destination.	Overall, recreational use would increase. The quality of primitive recreation would be reduced in the benchlands of the WSA as vehicular use of 24 miles of ways increases in the nondesignated area.

Wah Wah
Mountains WSA



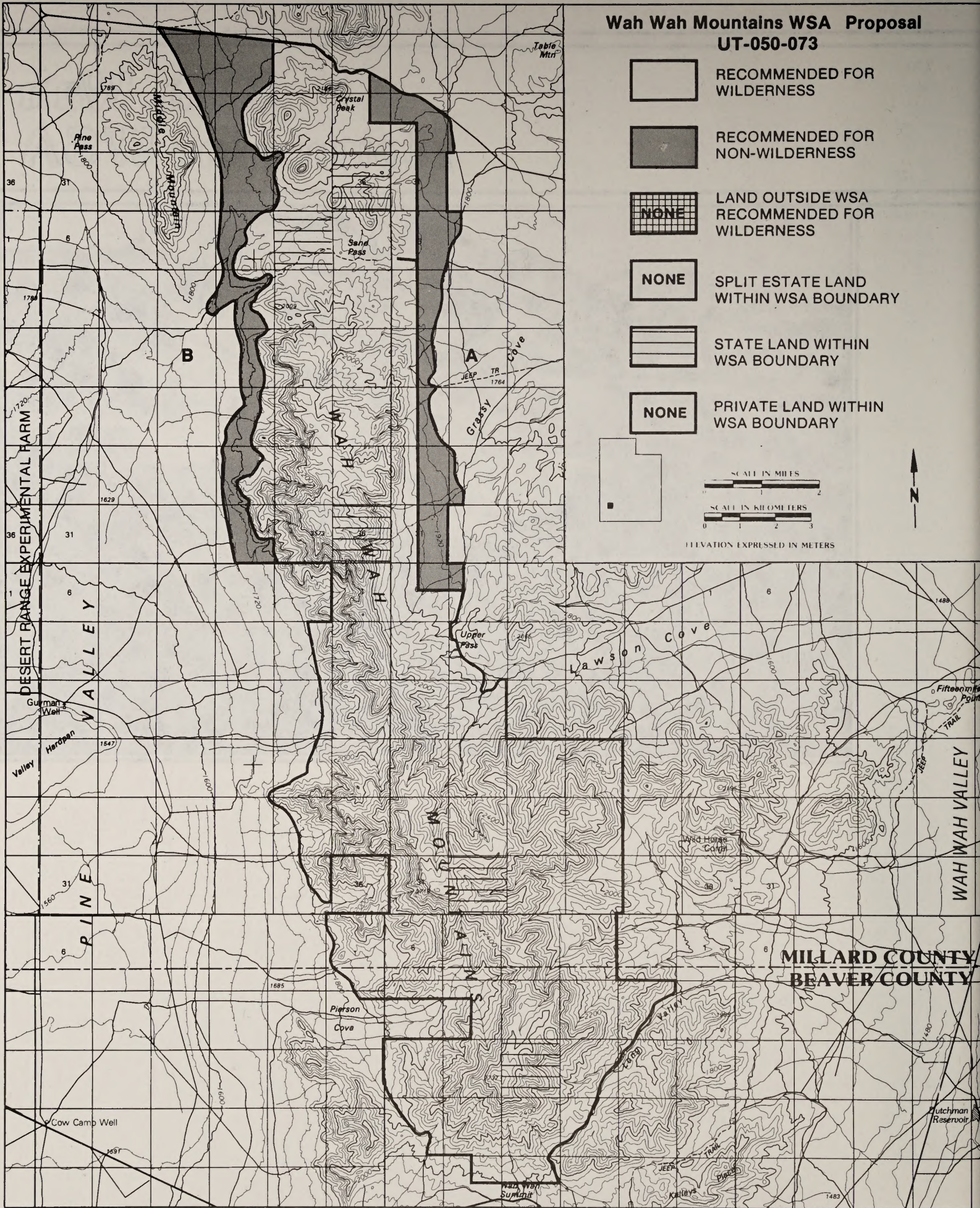
WAH WAH MOUNTAINS WSA

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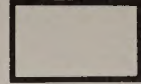
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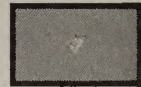
T. 26 S.



Wah Wah Mountains WSA Proposal UT-050-073



RECOMMENDED FOR WILDERNESS

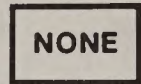


RECOMMENDED FOR NON-WILDERNESS



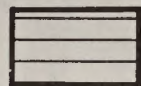
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LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS

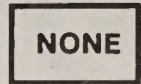


NONE

SPLIT ESTATE LAND WITHIN WSA BOUNDARY

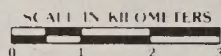
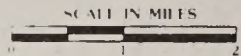
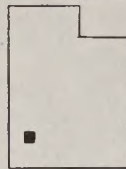


STATE LAND WITHIN WSA BOUNDARY

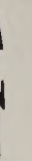


NONE

PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS



R. 16 W.

R. 15 W.

R. 14 W.

WAH WAH MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA: 42,140 acres

The Wah Wah Mountains Wilderness Study Area (WSA) (UT-050-073, UT-040-205) includes most of the Wah Wah Mountains in southwestern Millard County and northwestern Beaver County, about 30 miles west of Milford, Utah (population 1,293). The study area is an elongated unit, 20 miles from north to south by 5 miles, east to west (see Map). The WSA includes 42,140 acres of public land administered by the Bureau of Land Management (BLM) and five sections (3,202 acres) of State land (see Table 1). Approximately 35,000 acres are in Millard County and approximately 7,140 acres are in Beaver County.

Improved and unimproved roads along with legal subdivisions and section lines from much of the boundary of the WSA. The Wah Wah Mountains WSA is surrounded mostly by public lands.

The WSA encloses a narrow, flat-topped mountain range with steep, rugged sides. Elevations range from about 5,600 feet at the edges of the WSA to 8,980 feet. Pinyon-juniper woodland is the dominant vegetation type. Approximately 6,610 acres of the WSA are identified as a Resource Natural Area (RNA) or Outstanding Natural Area/Area of Critical Environmental Concern (ONA/ACEC).

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	42,140
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	3,202
Total	45,342
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	36,382
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	36,382
In-holdings (State, private)	3,202
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	5,758
Split-Estate	0
Total BLM land not recommended for wilderness	5,758
In-holdings (State, Private)	0

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

WAH WAH MOUNTAINS WILDERNESS STUDY AREA

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative, where 36,382 acres would be designated as wilderness and 5,758 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

36,382 acres

(recommended for wilderness)

5,758 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate 36,382 acres as wilderness and to release the remaining 5,758 acres of the WSA for other uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative, as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts. This recommendation for wilderness will further apply to any additional inholding acreage acquired through purchase or exchange with willing owners. The Appendix lists all inholdings in the portion recommended for designation and provides information on acquisition of the inholdings.

The central, most mountainous 36,382 acres of public lands within the WSA are recommended for wilderness designation because they include the best wilderness values. The WSA is remote. All of the area recommended for wilderness designation is natural and has outstanding opportunities for solitude and primitive recreation. Both ACEC's in the WSA would be in the designated area. Diversity of terrain and vegetative cover are distinctive. No conflict exists with other uses.

The portion of the WSA that is not recommended for wilderness designation is mostly benchlands in the northern part

of the WSA (Areas A and B). Although about 79 percent of the portion not recommended for wilderness has opportunities for solitude and primitive recreation, it lacks high quality scenic values, special features, and variety. Overall, open terrain and sparse vegetation in combination with adjacent roads make the nonrecommended area less valuable for wilderness than the recommended area.

3. CRITERIA USED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Crystal Peak, visible for more than 50 miles, is a white mountain of tuff remaining as a result of an ancient volcano. A stand of bristlecone pine, some over 50 feet tall and more than 4,000 years old, grow on the main ridge. Cougar, antelope, mule deer, chuckar, and raptors live in the unit. Impressive views from the central ridgeline of mountains give one a sense of the region's vastness and of the desert's profound solitude. Essentially all of the WSA meets the naturalness criteria of the Wilderness Act. Approximately 5 miles of ways within the WSA are substantially unnoticeable. In 1984, wildfire burned about 1,800 acres in Grassy Cove. The fire was controlled by hand and reclamation was not necessary. The Wah Wah Mountains are one of the most remote untouched mountain ranges in the West Desert. The WSA is comprised of grey tones of limestone cliffs and light-tan deserts dotted with dark green juniper trees.

B. Solitude

About 40,940 acres, including all of the area proposed for wilderness designation, meet the Wilderness Act standards for solitude, or seclusion from other people.

The WSA is sufficiently large (approximately 20 miles long, north to south) to

WAH WAH MOUNTAINS WILDERNESS STUDY AREA

allow visitors to be unaware of others in the vicinity. Canyons in the WSA and steep cliffs on both sides of the range provide screening. Vegetation also contributes to seclusion, especially in the higher elevations. Stands of pinyon and bristlecone pine enhance seclusion in all seasons. Vistas in all directions from the crest of the WSA contribute to the feeling of vastness and of being alone.

The Wah Wah Mountains WSA is in the South range of the U.S. Air Force (USAF) Utah Test and Training Range (UTTR), one of the country's busiest military air spaces. From 100 to 150 daily flights, 6 days a week, are made in the UTTR. Some flights are as low as 100 feet above ground level. The WSA is in the southern portion of the UTTR and is less affected by air traffic. Nevertheless, aircraft occasionally fly over the WSA and can be an annoyance that detracts from but generally does not eliminate overall opportunities for solitude.

About 1,200 acres in the WSA, in the benchlands west of Crystal Peak, do not meet the standards for solitude. The terrain and sparse vegetation do not offer seclusion.

C. Primitive and Unconfined Recreation

Wilderness Act standards for opportunities for primitive and unconfined recreation are substantially met on 40,940 acres. Currently it is estimated that 155 visitor days annually can be attributed to recreational activities in the WSA, including 25 days for fossil collecting, 32 days for geological sightseeing, and 98 days for biological sightseeing. The major primitive recreational use is hiking in conjunction with biological and geological viewing. The sheer limestone cliffs and Crystal Peak provide excellent geological sightseeing opportunities, and bristlecone and ponderosa pines and eagles, hawks, and other wildlife provide opportunities for nature studies and photography. Opportunities for rock climbing, horseback riding, camping, hunting, skiing, and cultural sightseeing were considered to be average or poor because of lack of water and steep terrain.

D. Special Features

Bald eagles and peregrine falcons, both endangered species, and golden eagles, a BLM sensitive species, inhabit the WSA. Other candidate threatened or endangered species that could inhabit the WSA include the ferruginous hawk, Swainson's hawk, long-billed curlew, western snowy plover, and white-faced ibis. These birds also frequent areas throughout the Great Basin and western United States. Three sensitive plant species that may be found in the WSA are the Cryptantha compacta, Eriogonum ammophilum, and Sphaeralcea caespitosa.

Bristlecone pine grows on about 190 acres in the higher parts of the WSA. Bristlecones are rare in this area and those in the WSA are exceptionally large, reaching heights of 50 feet or more. Bristlecone pines are among the oldest living trees.

Crystal Peak in the extreme north end of the WSA within the area recommended for wilderness designation, is a white mountain of tuff (weathered volcanic ash) that is visible for 50 miles.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS, but it would add an ecosystem (saltbrush-greasewood) not represented in the NWPS in Utah. PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area. The WSA is in the Intermountain Sagebrush Province/Ecoregion. The PNV ecosystems in the WSA are juniper-pinyon woodland (25,000 acres) and saltbrush-greasewood (17,140 acres). Both ecosystems are represented in the NWPS outside of Utah and in BLM study areas both in and outside of Utah. This information is summarized in Table 2 from data compiled in December 1989.

WAH WAH MOUNTAINS WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,128,907
Saltbush-Greasewood	3	45,553	37	1,014,467
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	234,433
Saltbush-Greasewood	0	0	7	129,705

Source: BLM File Data.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada standard metropolitan statistical areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

A Wah Wah Mountains wilderness would not contribute significantly to balancing the geographic distribution of areas within the NWPS in the western-central United States. Including the Wah Wah Mountains WSA in the NWPS could contribute to balancing the NWPS in the Great Basin, however.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	10	1,079,807	78	2,217,535
Provo-Orem, Utah	11	708,638	90	2,744,728
Las Vegas, Nevada	38	3,132,130	54	2,134,358

Source: BLM File Data.

As of January 1987, the NWPS included 65 areas comprising 2,898,792 acres in Utah and Arizona and Nevada, the adjacent states nearest the WSA. Within 100 miles of the WSA, the 7,000-acre Ashdown Gorge Wilderness is to the southeast and the 50,000-acre Pine Valley Mountain Wilder-

ness is to the south. Both are in the Dixie National Forest.

No wilderness areas have been designated to the north, east, or west in the vicinity of the WSA, however. Only six wilderness areas, totaling 272,994 acres,

WAH WAH MOUNTAINS WILDERNESS STUDY AREA

are in the Great Basin. Three wilderness areas in the NWPS have the same combination of PNV types as the Wah Wah Mountains WSA would have (see "Expanding the Diversity of Natural Systems . . ."). All three are in California. If designated, a Wah Wah Mountains Wilderness would supplement the distribution of wilderness in this region.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be managed as wilderness to preserve values now present in the area. Resource and land conflicts are not now a problem in the WSA and are not anticipated to be in the future.

There are no oil and gas leases in the portion of the WSA recommended as wilderness and new leases would not be issued. Thirty mining claims in the WSA are in the area recommended for wilderness, but development is not projected in the foreseeable future and they are not expected to be a manageability problem.

There are five State-owned sections (3,202 acres) scattered from north to south in the central portion of the recommended area. Major developments on these sections and related access and activity would reduce the quality of wilderness values in the southern portion of the wilderness, but the potential for development is low.

Livestock grazing could continue as at present, requiring little or no change in management.

The USAF has stated that military flights will continue in the vicinity of the WSA, whether it is designated or not. Overflights would detract from solitude and BLM management could not mitigate such disturbance. This conflict can be resolved only at the Congressional level.

The area not recommended as wilderness also could be managed as wilderness. There are presently no mining claims in this portion of the WSA. There is one post-FLPMA oil and gas lease with the

nonimpairment stipulation, but developments that would reduce the quality of wilderness values are not projected.

It would be administratively more difficult to protect this portion of the WSA from vehicle use and noise because the area is flatter and is bordered by roads. However, significant increases in vehicle use are not projected in the foreseeable future, and surface features such as rock are somewhat limiting to vehicle use.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Wah Wah Mountains WSA (USGS Bulletin 1749-B, Leslie J. Cox, et al., 1989). The area investigated was the 36,382 acre portion of the WSA that is recommended for wilderness designation. The report states that identified resources in the Wah Wah Mountains WSA include two small iron occurrences on the southwestern boundary, consisting of less than 100 short tons of inferred subeconomic iron-rich material. The area that was studied also has millions of cubic yards of inferred subeconomic resources of limestone and dolomite suitable for industrial and agricultural uses; of sandstone and quartzite suitable for container glass and industrial use; and of limestone, sandstone, and volcanic rock suitable for construction purposes. The study area has moderate energy resource potential for undiscovered oil and gas, and low energy resource potential for undiscovered uranium and geothermal energy. Several areas in the southern half of the study area have moderate mineral resource potential for undiscovered zinc, cadmium, and antimony, and moderate resource potential for associated molybdenum, lead, arsenic, bismuth, tungsten, and gold in several types of vein and replacement bodies and in concealed igneous breccia deposits. The metal occurrences are attributed to episodes of low-temperature mineralization originating with igneous activity. Some of the metals occur within an alteration zone around igneous intrusions. The rest of the study area has low resource potential for undiscovered zinc, cadmium, antimony, tungsten, molybdenum, lead, arsenic, bismuth, and gold.

WAH WAH MOUNTAINS WILDERNESS STUDY AREA

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives including designation of the entire area as wilderness.

Local Social and Economic Considerations

Social and economic factors concerning this WSA were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 46 inputs specifically addressing this WSA were received from 53 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter was not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs. In general, 35 commenters supported the wilderness designation for part or all of the WSA, while 14 commenters were opposed. Four commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features present in the WSA. The majority of those commenting in favor of wilderness were evenly from urban areas in Utah and outside the state. Of particular concern was the need to protect special features and primitive recreational opportunities.

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development, harm State and local economy, and restrict livestock management and rangeland improvements. The majority of these commenters

were from rural Utah, and were local to the area.

Two Federal agencies, the USAF and USBM, commented on the Draft EIS. The Federal agencies did not take a position regarding designation or nondesignation of the WSA. The USAF noted that low altitude flights will continue over the WSA with or without wilderness designation and that they will not negotiate nor sign any agreement to avoid the proposed wilderness area. This conflict can be resolved only on the Congressional level.

The USBM stated that BLM underrated the petroleum potential of the WSA.

No comment letters were received on the Final EIS.

There are five State sections (3,202 acres) in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the Wah Wah Mountains WSA. The State of Utah commented that it generally agrees as to the existence of the pristine quality of the WSA's wilderness characteristics and that it has the second highest wilderness quality in the region.

The State of Utah also stated that there are no known serious mineral conflicts and impacts on grazing interests could be reduced by elimination of the northern bench areas. Specific State of Utah comments on the Draft EIS dealt with errors in the mapping and description of State in-holdings, need for additional geologic information, and inconsistencies in the Land Use Plans sections.

The Millard County and Beaver County Master Plans do not specifically address wilderness. The County Commissions favor protection of natural and esthetic resources on public lands as well as multiple use and believe that these objectives can be met without wilderness designation. They have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation for BLM lands in Utah.

WAH WAH MOUNTAINS WSA

Table 4
Summary of Environmental Consequences

		Alternatives	
Recommendation		No Action/No Wilderness	All Wilderness (42,140 Acres)
Resource	Partial Wilderness (36,382 Acres)		
Impacts on Wilderness Values	Wilderness designation of 36,382 acres would result in preservation of wilderness values on about 86 percent of the WSA. In the foreseeable future, opportunities for solitude and primitive recreation would be slightly reduced in quality on 2 acres of the WSA from guzzler development, from which wildlife special features would benefit. Vehicular use of 4 miles of ways would continue to occasionally detract from opportunities for solitude and primitive recreation. Special features would be preserved.	Wilderness values would not be protected by wilderness designation. In the foreseeable future, opportunities for naturalness, solitude, and primitive recreation would be slightly reduced in quality on 2 acres of the WSA from guzzler development, from which wildlife special features would benefit. Vehicular use of 5 miles of ways would continue to occasionally detract from opportunities for solitude and primitive recreation. Special features would not be adversely affected.	Designation would preserve wilderness values throughout the WSA. In the foreseeable future, opportunities for naturalness, solitude, and primitive recreation would be slightly reduced in quality on 2 acres from guzzler development, from which wildlife special features would benefit.
Impacts on Livestock Management	This alternative would not adversely affect livestock management in the WSA because 4 of the 5 miles of ways and 58 percent of the forage would be in the nondesignated area.	Livestock grazing would not be adversely affected because management and access would continue as at present.	Vehicular use restrictions could inconvenience livestock operators in the area and increase the costs of controlling predation of livestock.

WAH WAH MOUNTAINS WILDERNESS STUDY AREA

Appendix

Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 23 S., R. 16 W., Sec. 36	640.00		State	No	Exchange	\$2,000	
T. 24 S., R. 16 W., Sec. 2	641.84		State	No	Exchange	\$2,000	
T. 24 S., R. 16 W., Sec. 36	640.00		State	No	Exchange	\$2,000	
T. 25 S., R. 15 W., Sec. 32	640.00		State	No	Exchange	\$2,000	
T. 26 S., R. 15 W., Sec. 16	640.00		State	No	Exchange	\$2,000	

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

South-West Region Part A

Cougar Canyon WSA

Red Mountain WSA

Cottonwood Canyon WSA

LaVerkin Creek Canyon WSA

Deep Creek WSA

North Fork Virgin River WSA

Orderville Canyon WSA

Parunuweap Canyon WSA

Canaan Mountain WSA

Moquith Mountain WSA

The Blues WSA

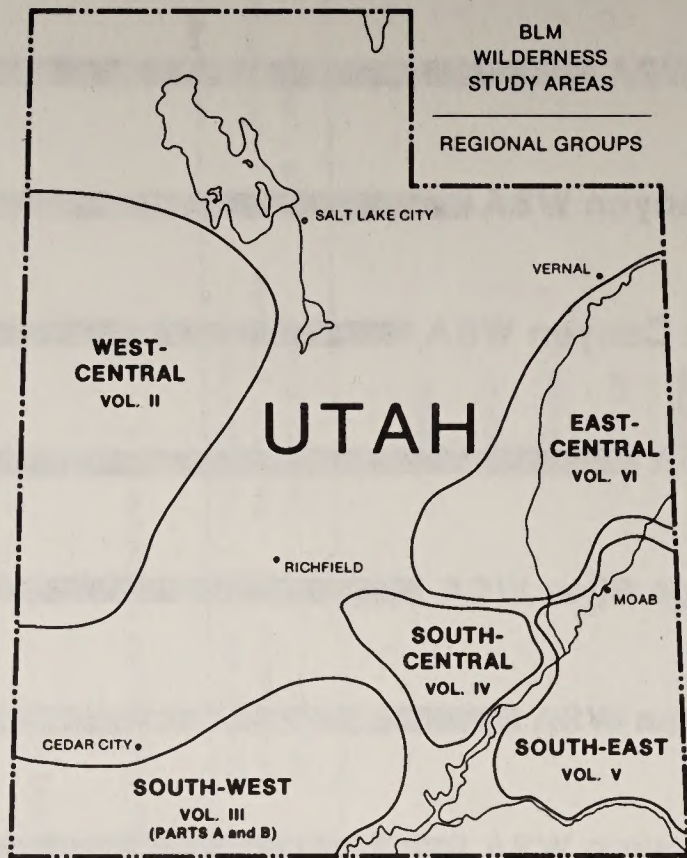
Mud Spring Canyon WSA

Paria-Hackberry WSA

The Cockscomb WSA

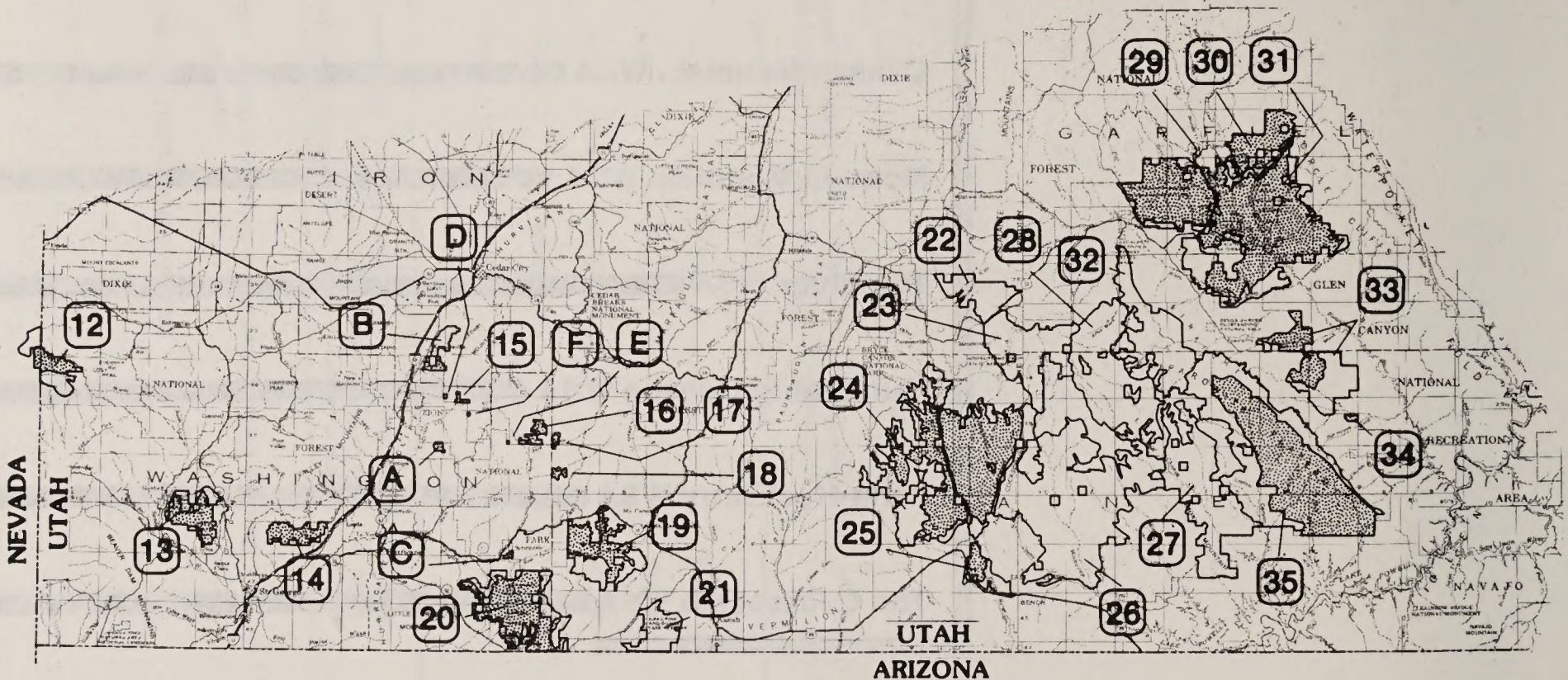
SOUTH-WEST REGION

LOCATION MAP



MAP REFERENCE NUMBER/STUDY AREA

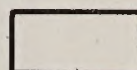
- 12 Cougar Canyon WSA
- 13 Red Mountain / Red Mountain 202 WSA
- 14 Cottonwood Canyon WSA
- 15 LaVerkin Creek Canyon WSA
- 16 Deep Creek WSA
- 17 North Fork Virgin WSA
- 18 Orderville Canyon WSA
- 19 Parunuweap Canyon WSA
- 20 Canaan Mountain WSA
- 21 Moquith Mountain WSA
- 22 The Blues WSA
- 23 Mud Spring Canyon WSA
- 24 Paria-Hackberry / Paria-Hackberry 202 WSA
- 25 The Cockscomb WSA
- 26 Wahweap WSA
- 27 Burning Hills WSA
- 28 Death Ridge WSA
- 29 Phipps-Death Hollow ISA Complex
- 30 Steep Creek WSA
- 31 North Escalante Canyons / The Gulch ISA Complex
- 32 Carcass Canyon WSA
- 33 Scorpion WSA
- 34 Escalante Canyons Tract 5 ISA Complex
- 35 Fifty Mile Mountain WSA
- A Red Butte WSA
- B Spring Creek Canyon WSA
- C The Watchman WSA
- D Taylor Creek Canyon WSA
- E Goose Creek Canyon WSA
- F Beartrap Canyon WSA



BLM RECOMMENDATION



BLM WSAs or portions of WSAs that would be designated wilderness



BLM WSAs or portions of WSAs that would NOT be designated wilderness



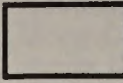


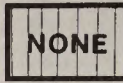
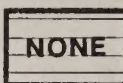
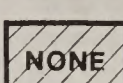
BLM WSAs under study by adjacent state

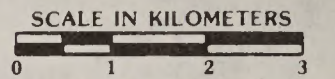
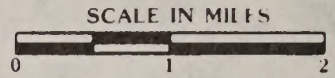
Cougar Canyon WSA



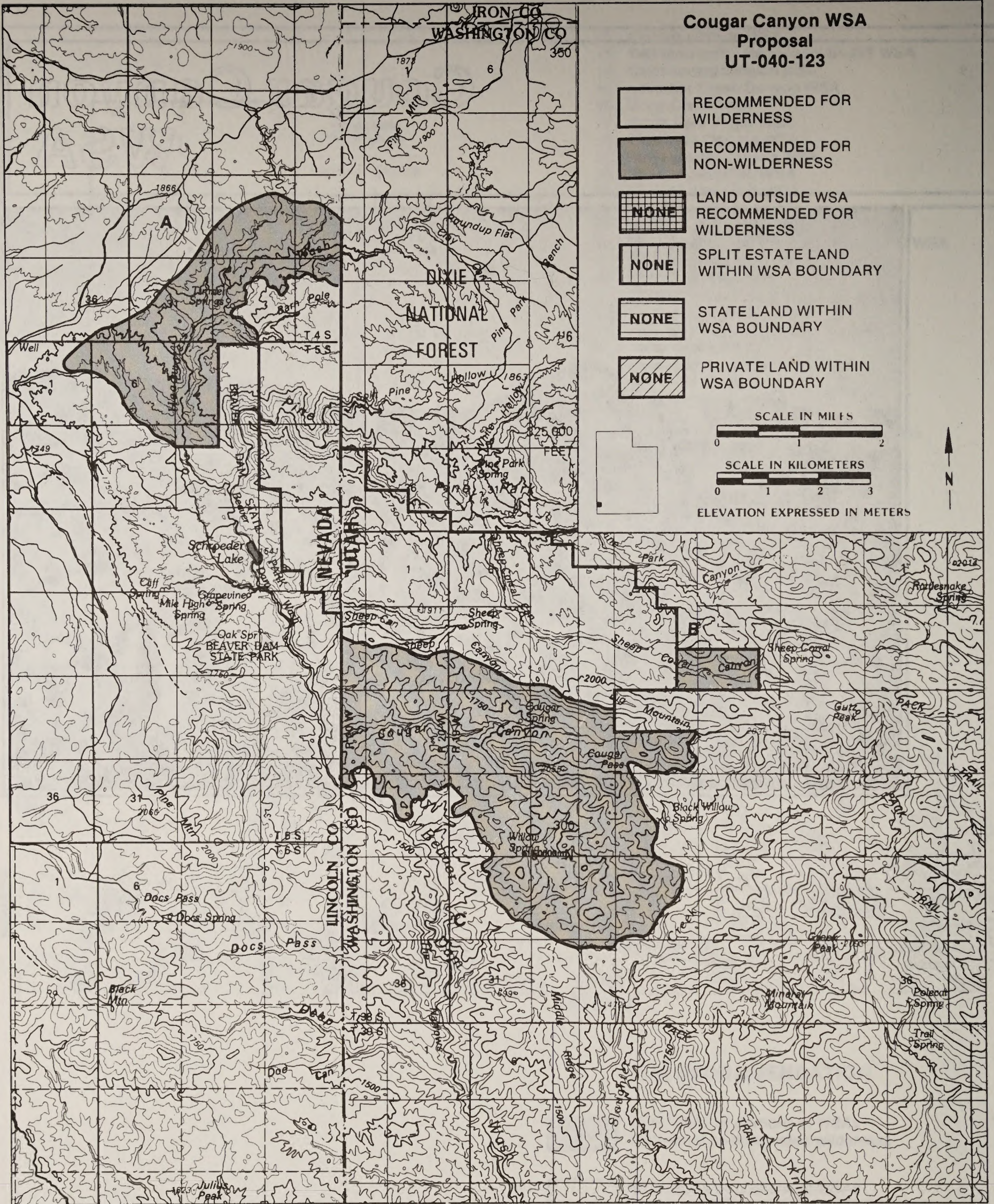
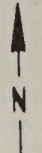
COUGAR CANYON WSA

Cougar Canyon WSA Proposal UT-040-123

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS



T. 4 S.

T. 5 S.

T. 6 S.

T. 38

T. 39

COUGAR CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 15,968 acres

The Cougar Canyon Wilderness Study Area (WSA) (UT-040-123, NV-050-166) is in northwestern Washington County, Utah; and northeastern Lincoln County, Nevada; about 35 miles northwest of St. George, Utah (population 11,350). The study area is about 10 miles long, from northwest to southeast, and is about 4 miles wide at the maximum (see Map). The WSA includes 10,568 acres of public land in Utah and 5,400 acres in Nevada (Tunnel Spring WSA) administered by the Bureau of Land Management (BLM). No State, private, or split-estate lands are included (see Table 1). In Utah, the study area is bordered on the north and northeast by the Dixie National Forest.

In Nevada, the WSA is adjacent to public lands and Beaver Dam State Park on the southwest.

The terrain consists of steep, mountainous canyons, long ridges, and rough drainages. Various kinds of volcanic rocks predominate. The area is at the head of Beaver Dam Wash, and elevations range from 5,000 to 6,700 feet. Vegetation is mostly pinyon-juniper and sagebrush.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

TOTAL ACREAGE	
WITHIN THE WSA	ACRES
BLM (surface and subsurface)	15,968
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	15,968
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	6,408
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	6,408
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	9,560
Split-Estate	0
Total BLM land not recommended for wilderness	9,560
In-holdings (State, Private)	0

Source: BLM File Data

COUGAR CANYON WILDERNESS STUDY AREA

**TABLE 1 (CONTINUED)
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

UTAH	
WITHIN THE WSA	ACRES
BLM (surface and subsurface)	10,568
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	10,568
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	4,228
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	4,228
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	6,340
Split-Estate	0
Total BLM land not recommended for wilderness	6,340
In-holdings (State, Private)	0
NEVADA	
WITHIN THE WSA	ACRES
BLM (Surface and subsurface)	5,400
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	5,400
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	2,180
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	2,180

Source: BLM File Data

COUGAR CANYON WILDERNESS STUDY AREA

TABLE 1 (CONTINUED)
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA

NEVADA (Continued)	
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY (continued)	
In-holdings (State, Private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	3,220
Split-Estate	0
Total BLM land not recommended for wilderness	3,220
In-holdings (State, Private)	0

Source: BLM File Data

Three alternatives were analyzed in the EIS: a partial wilderness alternative where 6,408 acres would be designated as wilderness and 9,560 acres would be released for other uses, which is the recommendation in this report; a no action (no wilderness) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 6,408 acres
(recommended for wilderness)
- 9,560 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 6,408 acres as wilderness and to release the remaining 9,560 acres for uses other than wilderness. With this recommendation, 4,228 acres of wilderness would be in Washington County, Utah, and 2,180 acres would be in Lincoln County, Nevada. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The boundary of the recommended area is along legal subdivisions that reflect boundaries with Dixie National Forest, Nevada State Park, and private lands. Elsewhere the boundary encloses the portion of the WSA with the highest wilder-

ness values (see Map). The recommended area includes all of the area with outstanding opportunities for solitude and primitive recreation and all of the highest visual qualities. No conflicts exist with other uses.

In the Tunnel Spring area of the northwestern part of the WSA not recommended for wilderness designation (Area A), there are no outstanding opportunities for primitive recreation, visual aspects are common, and diversity of terrain and vegetation is limited. The southern portion of the WSA (Areas B and C) lacks diversity and outstanding opportunities for primitive recreation.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. All of the WSA meets Wilderness Act criteria for naturalness. Human intrusions that existed when the WSA was identified included 6 miles of range fences, one small tree and shrub planting in 1971 at Tunnel Springs (Nevada portion) for erosion control, and one enclosure for grazing studies on Middle Ridge in the southern

COUGAR CANYON WILDERNESS STUDY AREA

end of the WSA. Recently, about 1 acre in the WSA was disturbed by a spring development and 0.5 of fence. All of these disturbances have been reclaimed to a substantially unnoticeable condition.

B. Solitude

About 1,300 acres, all of which are in the area recommended for wilderness designation, meet the criteria for outstanding opportunities for solitude. The tributaries and main canyons of the Pine Park-Split Pine Hollow system, the tributaries and outcrops in the south rim of Pine Park Canyon, and the lower portion of Sheep Corral Canyon all have terrain and vegetation which provide excellent screening.

The remaining 14,668 acres of the WSA do not meet the standards for outstanding solitude. The size and configuration of the WSA neither enhance nor lessen opportunities for solitude and many canyons are too shallow or too wide to provide solitude by screening visitors.

The WSA is near the flight path for military aircraft from Nellis Air Force Base near Las Vegas. Four aircraft at once fly at subsonic speeds over the WSA as low as 100 feet above ground level, two or three times a week. Noise from the overflights detracts from solitude in the WSA.

C. Primitive and Unconfined Recreation

Only 400 acres, in the northern and eastern parts of the WSA, provide outstanding opportunities for primitive recreation. These areas, Pine Park Canyon and the eastern portion of Sheep Corral Canyon, are easily accessible from the Dixie National Forest Pine Park Campground and provide excellent hiking in conjunction with opportunities for scenic viewing, fishing, bird watching, wading, picnicking, and photography. These areas are too rugged for horseback riding.

Opportunities for primitive recreation are not outstanding in the remaining 15,568 acres (97 percent of the WSA). The Dixie National Forest and Beaver Dam State Park, east and west of the WSA respectively, are relatively heavily used for recreation but few people enter

the WSA, perhaps because of the rugged terrain and an assumption that it lacks recreational opportunities.

D. Special Features

Five to 7 miles of streams in the WSA support trout fisheries, which are unusual in BLM lands in the surrounding desert region. These fisheries are in perennial waters in Beaver Dam Wash and are the only native reproducing fisheries on BLM lands in the area.

Candidate threatened or endangered species include the Virgin River spinedace which, with the speckled dace and desert sucker, may inhabit Beaver Dam Creek and its tributaries; and the ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, mountain plover, western snowy plover, western yellow-billed cuckoo, white-faced ibis, Arizona Bell's vireo, and Merriam's kangaroo rat.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of part of this WSA would add a potential natural vegetation (PNV) ecosystem that is not presently represented in the NWPS in Nevada, although it is represented in Utah and elsewhere in the NWPS and is widely represented in BLM study areas in Nevada, Utah, and other states.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference.

The WSA is in the Intermountain Sagebrush Province/Ecoregion and the PNV is entirely juniper-pinyon woodland (10,568 acres in Utah and 5,400 acres in Nevada). The sagebrush/juniper-pinyon woodland PNV is represented in four wilderness areas outside of Utah and two in Utah, and is widely represented in other WSAs.

This information is summarized in Table 2 from information compiled in December 1989.

COUGAR CANYON WILDERNESS STUDY AREA

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,137,939
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	232,897
NEVADA (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	0	0	42	1,522,151

Source: BLM File Data.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of this population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The Cougar Canyon WSA would not contribute significantly to balancing the geographic distribution of areas within the NWPS, but it could contribute to balancing the NWPS in the Great Basin.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	55	2,176,498

Source: BLM File Data.

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah and the nearest adjacent states, Arizona and Nevada. Ten designated wilderness areas are within 100 miles of the WSA.

In a clockwise direction, beginning to the east, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 50,000-acre Pine Valley Mountain Wilderness (FS), the 6,500-acre Cotton-

wood Point Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), and to the south, the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), and the 37,300-acre Grand Wash Cliffs wilderness (BLM). Only six wilderness areas, however, totaling 272,994 acres, have been

COUGAR CANYON WILDERNESS STUDY AREA

designated in the Great Basin. A Cougar Canyon Wilderness would add to the NWPS in the southeastern part of the Great Basin.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA recommended for wilderness designation is manageable as wilderness. The WSA is rugged, relatively remote, and currently has only low to moderate recreational use (500 annual visitor days, of which 125 are vehicular). No ways penetrate the WSA, vegetation is too sparse to provide woodland products, and mineral-related conflicts are unlikely. Livestock grazing could continue in accordance with the applicable BLM land use plans. Wilderness designation would strengthen current management efforts to protect the Beaver Dam watershed and provide wildlife habitat. Military overflights may continue, depending on U.S. Air Force needs and decisions. If the flights continue, the resulting distraction could not be mitigated by BLM administrative actions. This conflict can be resolved only at the congressional level.

The 9,560-acre portion not recommended for wilderness designation also could be managed as wilderness. However, it would continue to be managed under the applicable BLM plans. No change in management is anticipated if the area is released from wilderness study status. Current plans propose watershed and wildlife habitat improvements, keeping the area open for off-road vehicle use, and maintaining 1,088 acres as public water reserves.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) have issued a draft mineral resource report on their study of the 6,408 acres proposed for wilderness designation (USGS Open File Report 90-331, 1990). The report indicates that there is low potential for gold, silver, copper, and mercury and low potential for zeolite and perlite resources. There is no potential for oil and gas.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 57 inputs specifically addressing this WSA were received from 74 commenters including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 59 commenters supported wilderness designation for part or all of the WSA, while 10 commenters were opposed. Five commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the special features in the WSA and the protection of wildlife and wildlife habitat that wilderness designation would offer. The majority of those commenting in favor of wilderness were from other states. Those opposing wilderness did not have a consensus opinion. The majority were from rural Utah.

One Federal agency, the FS, commented that it concurs with a recommendation not to propose wilderness.

COUGAR CANYON WILDERNESS STUDY AREA

No comment letters were received on the Final EIS.

There are no State in-holdings in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State of Utah commented that compared with other WSAs in the region, the Cougar Canyon WSA possesses moderate to low wilderness values, low conflicts, and high value scenery and special features. Wilderness protection would benefit recreation and wildlife values. The State of Utah noted some conflicts with livestock, management of the Nevada State Park, and with potential water resource developments.

The State of Nevada did not comment.

The Washington County Commission (Utah) opposes wilderness designation for this WSA and has endorsed The Consolidated Local Government Response to Wilderness which opposes wilderness designation of BLM lands in Utah.

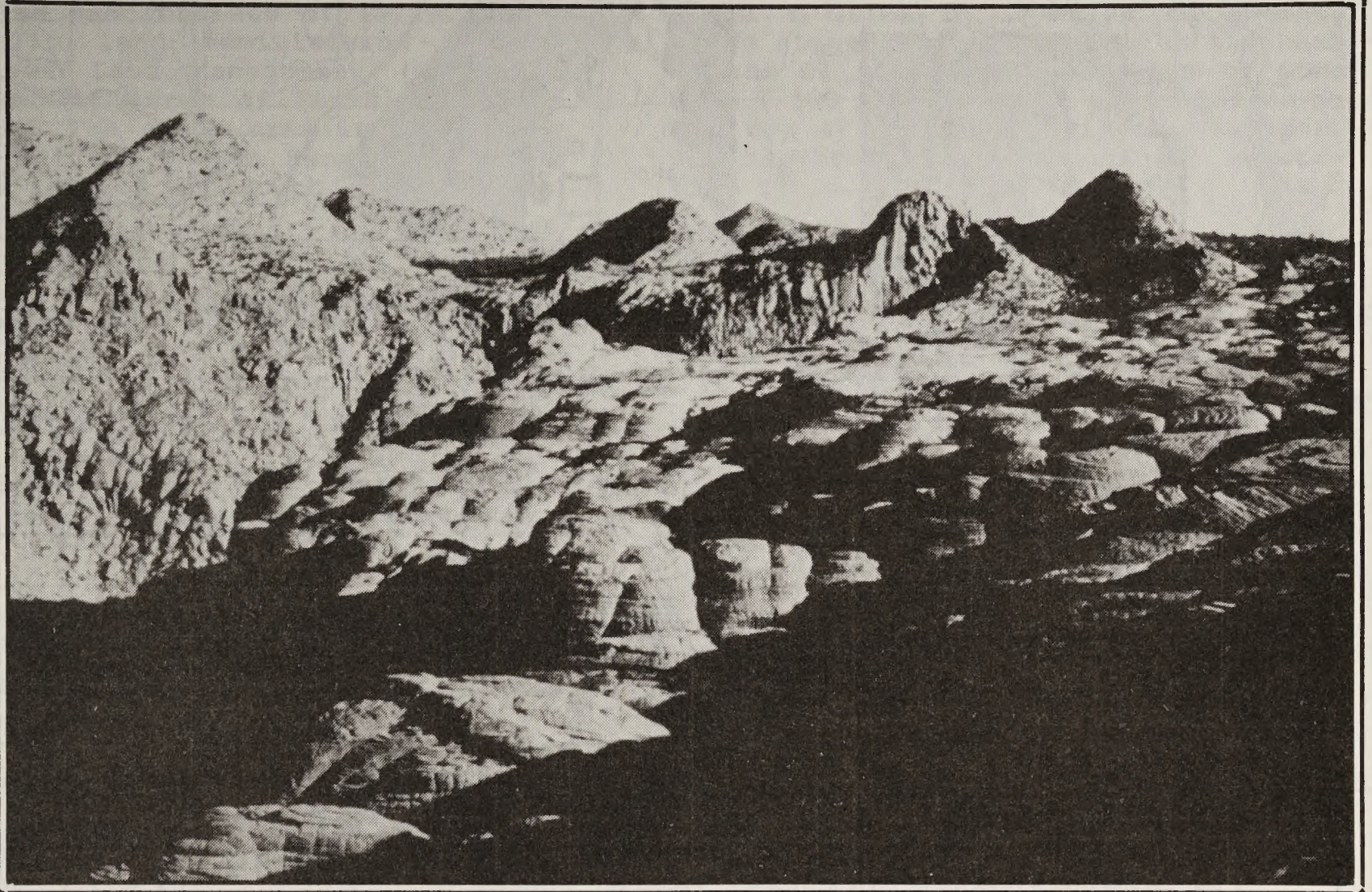
The Lincoln (Nevada) County Commission opposes wilderness designation for this WSA.

COUGAR CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

Issue Topics	Alternatives		
	Recommendation Partial Wilderness (6,408 Acres)	No Action/No Wilderness	All Wilderness (15,968 Acres)
Impacts on Wilderness Values	Wilderness values would be preserved in the designated area which is about 40 percent of the WSA. Wilderness values would be slightly reduced in quality on 6 acres of the WSA, mostly in the nondesignated portion. The disturbance would be due to construction of rangeland projects. Wildlife special features would benefit from the spring developments.	Wilderness values would not be protected by wilderness designation. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be reduced in quality on 8 acres of the WSA. The disturbance would be due to construction of rangeland projects. Wildlife special features would benefit from the spring developments.	Wilderness values would be preserved throughout the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 6 acres of the WSA. The disturbance would be due to construction of rangeland projects. Wildlife special features would benefit from the spring developments.
Impacts on Wildlife Habitat and Populations	Effects would be approximately the same as for the All Wilderness Alternative.	Rangeland development on 8 acres would not adversely affect wildlife.	Wildlife would benefit due to solitude.
Impacts on Livestock Management	Effects would be approximately the same as for the All Wilderness Alternative.	Livestock grazing would not be affected because management and access would continue as at present.	Effects on livestock operations would be negligible because there is no use of vehicles in the WSA at present and proposed developments could be carried out.

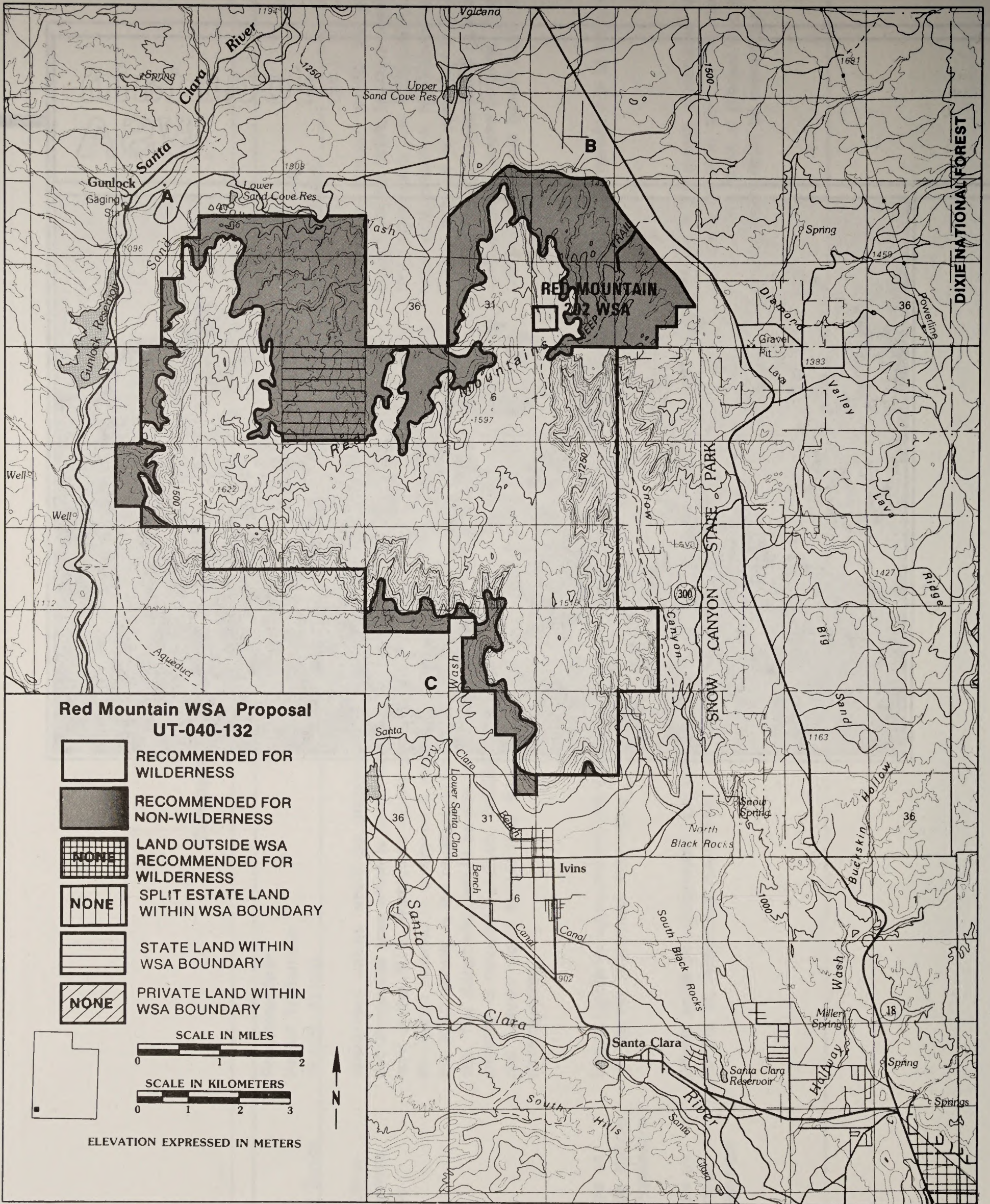
Red Mountain WSA



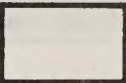

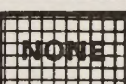
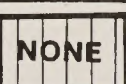
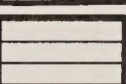
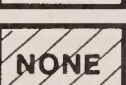
RED MOUNTAIN / RED MOUNTAIN 202 WSA

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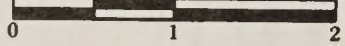
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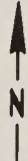
Red Mountain WSA Proposal UT-040-132

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY

SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS

T. 40 S

T. 41 S

T. 42 S

RED MOUNTAIN/RED MOUNTAIN 202 WILDERNESS STUDY AREA

1. THE STUDY AREA: 18,290 acres

The Red Mountain/Red Mountain 202 Wilderness Study Area (WSA) (UT-040-132/UT-040-132A) is in west-central Washington County, 9 miles northwest of St. George, Utah (population 11,350). The unit is about 7 miles from north to south and 6 miles from east to west (see Map). The WSA consists of 18,290 acres of public land administered by the Bureau of Land Management (BLM). It includes 745 acres of State land (see Table 1). The study area is bounded by State, Shivits Indian Reservation, and private land on the south, Snow Canyon

State Park on the east, and the State Highway 18 right-of-way on the northeast. The WSA is defined by section and subsection lines on the north and the west, which exclude areas of use and development along the Santa Clara River.

The study area includes almost all of Red Mountain, a sandstone tableland about 6 miles by 6 miles in extent, which rises from 3,240 feet at the base of the cliffs to an elevation of more than 5,500 feet on small promontories at the top of the mesa. Pinyon, juniper, and sagebrush are the dominant vegetative types.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	18,290
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	745
Total	19,035
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	12,842
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	12,842
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	5,448
Split-Estate	0
Total BLM land not recommended for wilderness	5,448
In-holdings (State, Private)	745

Source: BLM File Data

Forty acres of private land within the northeast portion of the WSA were acquired by exchange of public land under Section 202 of the Federal Land Policy and Management Act (FLPMA) and were des-

ignated as the Red Mountain 202 WSA. This small WSA is now included as part of the Red Mountain/Red Mountain 202 WSA. The combined WSA was studied under Sections 603 and 202 of FLPMA and was

RED MOUNTAIN/RED MOUNTAIN 202 WILDERNESS STUDY AREA

included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative where 12,842 acres would be designated as wilderness and 5,448 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

12,842 acres

(recommended for wilderness)

5,448 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate 12,842 acres as wilderness and to release the remaining 5,448 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The portion recommended for wilderness designation would include the highest and best wilderness values in the WSA, while excluding areas with relatively intense off-road vehicular (ORV) recreation use and would make the 500-acre area at the south edge of the WSA available for future community growth (see Map). The boundary of the recommended portion is along breaks in slope, such as the base of the Red Cliffs, and lands under non-Federal ownership which determine the WSA boundary (see Map). The WSA is easily accessible via paved and unpaved roads from St. George and nearby communities, yet the interior of the mesa is not easily reached and is a pristine "island" ecosystem that contrasts with the surrounding area. The recommended area also includes all of the portions of the WSA with outstanding opportunities for solitude and primitive recreation. The entire WSA has outstanding scenery. The Red Mountain WSA provides outdoor opportunities that are found elsewhere only in Snow Canyon State Park.

The portion (Area A) not recommended is at the base of the cliffs. Here wilderness qualities are low and there is potential for needed community expansion. The landscape in this part of the WSA is common to the region. Areas A and B in the northern portion of the WSA, lack significant wilderness quality.

Designation of the entire WSA would preclude off-highway vehicle use and deny the opportunity for community use and expansion. These uses could continue with the recommended partial wilderness designation.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. All of the WSA appears to be natural. In close proximity to the St. George urban area and displaying a red rock landscape, Red Mountain is perceived as an island of naturalness by residents and tourists alike. Imprints that existed at the time of wilderness inventory included 1 mile of road, 4 miles of way, a 0.5 mile of fence remnants, and a livestock watering trough. About 5 surface acres were affected, but the imprints are substantially unnoticeable.

No surface-disturbing activities have occurred since the inventory.

B. Solitude

About 4,240 acres (23 percent of the WSA) meet the criteria for outstanding opportunities for solitude, and all of this area is within the portion recommended for wilderness designation. The WSA gives visitors a feeling of vastness and isolation which allows for the dispersion of recreational activities and the opportunity to find seclusion.

Approximately 14,050 acres do not provide outstanding opportunities for solitude. Outside sights and sounds detract

RED MOUNTAIN/RED MOUNTAIN 202 WILDERNESS STUDY AREA

from the feeling of solitude. The northwestern portion of the WSA is as close as 1 mile from a military flight path used by Nellis Air Force Base near Las Vegas, Nevada. Flights of four aircraft fly this route at subsonic speeds, as low as 200 feet above ground, two or three times a week, detracting from opportunities for solitude in the WSA.

C. Primitive and Unconfined Recreation

Outstanding opportunities for primitive recreation exist on approximately 2,640 acres (14 percent of the WSA), all of which are in the portion recommended for wilderness designation. Opportunities for hiking, backpacking, and horseback riding are above average for the area in which the WSA is located.

Hiking in the WSA provides opportunities to view Snow Canyon State Park, to observe sandstone terrain in the WSA, and to visit natural slickrock basins or tanks in a branch of Snow Canyon.

Some parts of the WSA with high scenic value cannot be reached in 1-day hikes. Backpacking allows visitors to view the southern and western rims above the Santa Clara River and to spend more time in the WSA with greater opportunity for different experiences. Horseback riding similarly expands the visitor's range, although the lack of water generally limits the use of horses to 1-day rides. Demand for the WSA is geographically focused upon these outstanding opportunities. Recreation opportunities are not considered outstanding on the remaining 15,650 acres.

D. Special Features

All of the WSA is rated as outstanding for scenic quality.

The bald eagle, an endangered species, hunts in the WSA primarily in winter, but no roosting or special areas have been identified.

Golden eagles, a BLM sensitive species, occasionally visit the WSA.

The WSA has cougar habitat and is within a Utah cougar management unit from which the harvest over a recent 11-year period

has averaged 20 animals annually, indicating a sizeable population.

Although cougars are seldom seen, visitor awareness that they may be present in an area adds to the wilderness experience.

U.S. Fish and Wildlife Services (FWS) candidate threatened or endangered species which may inhabit the WSA include the Great Basin Silverspot butterfly, desert tortoise, gila monster, ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, mountain plover, western snowy plover, western yellow-billed cuckoo, Merriam's kangaroo rat, and Virgin River montane vole.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of part of this WSA would not add an ecosystem that is not presently represented in the NWPS or BLM study areas outside of Utah. The potential natural vegetation (PNV) that would develop if the WSA remained undisturbed is juniper-pinyon woodland. That is represented in the NWPS in Utah and in 75 other BLM study areas nationally.

This information is summarized in Table 2 from information compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of Las Vegas.

C. Balancing the Geographic Distribution of Wilderness Areas

The Red Mountain WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS in the west-central

RED MOUNTAIN/RED MOUNTAIN 202 WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,137,939
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	241,143

Source: BLM File Data.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	55	2,176,498

Source: BLM File Data.

United States. but it could supplement the NWPS in the Great Basin.

As of January 1987, the NWPS included 65 wilderness areas comprising 2,898,972 acres in Utah and the adjacent states of Arizona and Nevada. Ten designated wilderness areas are within 100 miles of the WSA. In a clockwise direction, beginning to the northeast, are the 50,000-acre Pine Valley Mountain Wilderness (Forest Service [FS]), the 7,000-acre Ashdown Gorge Wilderness (FS), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), and to the south, the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), and the 37,300-acre Grand Wash Cliffs Wilderness (BLM). No designated wilderness areas are within 100 miles to the west of the WSA.

Manageability (The area must be able to be managed effectively to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be managed as wilderness to preserve values now present in the area. The area recommended for wilderness designation does not include State land, mineral leases, or mining claims. No proposals for any kind of development have been made. Access into much of the area is relatively difficult, and current ORV use is in the portion of the WSA that is not being recommended for wilderness designation.

The portion of the WSA that would not be designated also could be managed as wilderness, but some conflicts would result because of existing nearby ORV use and potential community use and expansion on 500 acres. Transfer of lands or leasing for recreation and public purposes would alleviate some management problems relating to ORV use and community expansion. Military overflights would continue to detract from opportunities for solitude. This conflict could not be controlled by BLM managers and could be resolved only at the Congressional level.

RED MOUNTAIN/RED MOUNTAIN 202 WILDERNESS STUDY AREA

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Red Mountain WSA (USGS Bulletin 1746-D, B.B. Houser, et al., 1988). The mineral resources study included 17,450 acres of the WSA. The report indicates that inferred subeconomic resources of common-variety building stone and silica sand are present at the surface. The resource potential for metallic minerals and for oil and gas is low. The energy resource potential for high-temperature geothermal sources in the eastern part of the study area is moderate, whereas the entire study area has high potential for low-temperature geothermal sources. There is no energy resource potential for coal.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 37 inputs specifically addressing this WSA were received from 86 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 34 commenters supported wilderness designation for part or all of the WSA, while 49 commenters were opposed. Three commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the presence of wilderness values, including special features, and that wilderness designation would complement the adjacent Snow Canyon State Park. The majority of those commenting in favor of wilderness were from outside of Utah. Of particular concern was the need to protect threatened, endangered, and sensitive species.

Those opposing wilderness were concerned that wilderness would restrict public access in favor of the few, create conflicts between vehicular and nonmotorized recreational use, and that wilderness designation is unnecessary and existing management is adequate. Most of those opposing wilderness were from outside Utah and were affiliated with recreation groups.

Two Federal agencies, the National Park Service (NPS) and USBM commented on the Draft EIS. The NPS recommended that BLM identify the WSA as a proposed National Natural Landmark.

The USBM noted that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. These findings have been incorporated into the Final EIS and study report.

No comment letters were received on the Final EIS.

There are 745 acres of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State noted that the WSA possesses moderate wilderness values and low conflicts with other land uses except for a moderate potential for oil and gas and for aquifer development. The State believes that the wilderness recommendation mitigates potential conflicts with

RED MOUNTAIN/RED MOUNTAIN 202 WILDERNESS STUDY AREA

nearby communities and with future community expansion and development.

The Washington County Commission is opposed to wilderness designation of the WSA and has endorsed The Consolidated Local Government Response to Wilderness which opposes wilderness designation for BLM lands in Utah. The Commission commented that the WSA is underlain by an aquifer that could provide municipal water for expanding communities in Washington County.

RED MOUNTAIN/RED MOUNTAIN 202 WSA

Table 4
Comparative Summary of Impacts by Alternative

		Alternatives	
Issue Topic	Recommendation Partial Wilderness (12,842 Acres)	No Action/No Wilderness	All Wilderness (18,290 Acres)
Impacts on Wilderness Values	Wilderness values would be preserved in the designated area, which is about 70 percent of the WSA. In the nondesignated area, community expansion would result in the direct loss of naturalness, opportunities for solitude and primitive recreation, Class A scenery, and special status species habitat on 500 acres. An indirect reduction in the quality of opportunities for solitude and scenic quality would occur on an additional 1,000 acres. Continued and increased vehicular use of 3 miles of way would detract from wilderness opportunities in the nondesignated portion of the WSA.	Wilderness values would not be protected by wilderness designation. In the foreseeable future, naturalness, opportunities for solitude and primitive recreation, Class A scenery, and special status species habitat, would be directly lost on 500 acres of the WSA due to community expansion. An indirect reduction in the quality of opportunities for solitude and primitive recreation and scenic quality would occur on an additional 1,000 acres. Continued and increased vehicular use of 4 miles of way would detract from opportunities for solitude and primitive recreation.	Wilderness values, including naturalness, opportunities for solitude and primitive recreation, and such special features as Class A scenery, special status species, and wildlife associated with wilderness would be preserved.
Impacts on Soils	Effects would be the same as for the No Action/No Wilderness Alternative.	There would be slight increases in soil loss and salinity from the 500 acres disturbed for community expansion. These increases would be temporary and would be expected to decrease after completion of development.	No impacts on soils are anticipated because of limited surface disturbance.
Impacts on Livestock Management	Restrictions on vehicular use of 1 mile of way would be a minor inconvenience for the six permittees.	Livestock management and grazing would not be affected because management and access would continue as at present.	Vehicular use restrictions on 4 miles of ways could inconvenience six livestock operators in the area, but the overall effect on methods and costs of livestock management would be negligible.
Impacts on Recreation	Impacts on recreational use would be the same as described for the No Action/No Wilderness Alternative.	The quality of primitive recreational use would be lost or reduced on about 8 percent of the WSA due to community expansion. Such use would be reduced in quality on the northeastern portion due to continued vehicular use of existing roads and ways. Primitive and motorized recreational use would increase.	Opportunities for primitive recreational use would be increased by this alternative, although opportunities for motorized recreational use would be foregone. ORV use would not be reduced on a regional basis.

Cottonwood Canyon WSA



COTTONWOOD CANYON WSA

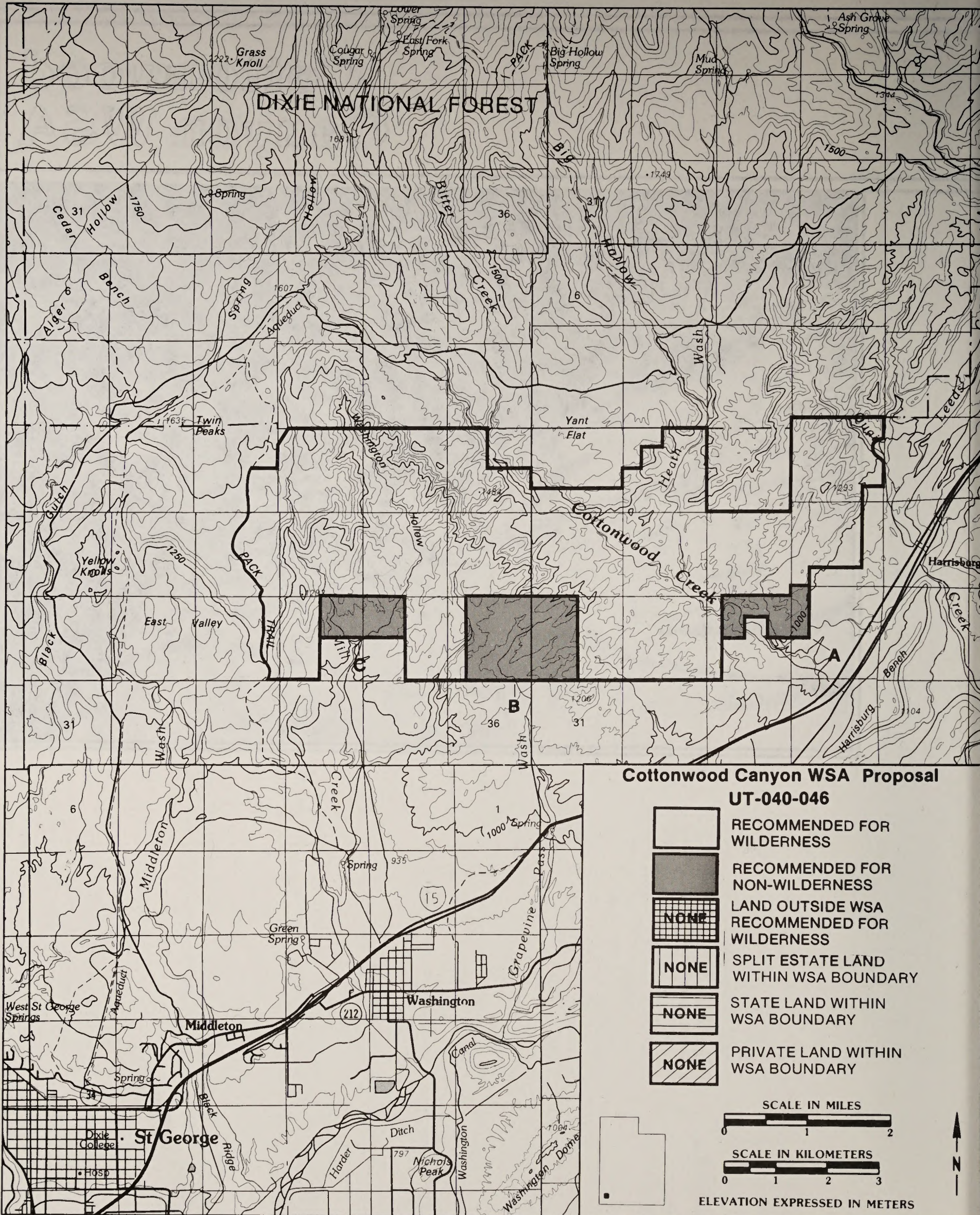
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T. 40 S.

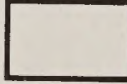
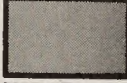
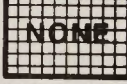
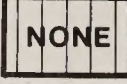
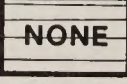
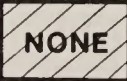
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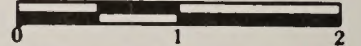


Cottonwood Canyon WSA Proposal

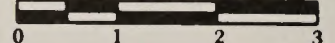
UT-040-046

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY

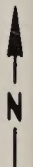
SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS



COTTONWOOD CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 11,330 acres

The Cottonwood Canyon Wilderness Study Area (WSA) (UT-040-046) is in south-central Washington County, about 5 miles northeast of St. George, Utah (population 11,350). The unit is about 3 miles from north to south and 7 miles long from east to west (see Map). The WSA is entirely public lands administered by the Bureau of Land Management (BLM). There are no private, State, or split-estate lands within the WSA (see Table 1). The study area is bounded on the north by Dixie National Forest, on the west by a jeep trail, on the south by a block of State land, and on the east by section and subsection lines (see Map). Interstate Highway 15 (I-15) is within 1 mile of the eastern edge of the WSA.

Elevations in the study area range from 3,200 feet at the southeast edge to more than 4,800 feet in the northwest. The terrain is rugged and characterized by southeast trending canyons 500 to 1,200 feet deep cut into the sandstone. Small mesas in the western part of the WSA are lava-capped. Blackbrush and desert shrub are the dominant vegetative type over 80 percent of the WSA, with pinyon and juniper woodland over most of the remaining area.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	11,330
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	11,330
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	9,853
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	9,853
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	1,477
Split-Estate	0
Total BLM land not recommended for wilderness	1,477
In-holdings (State, Private)	0

Source: BLM File Data

COTTONWOOD CANYON WILDERNESS STUDY AREA

Three alternatives were analyzed in the EIS: a partial wilderness alternative where 9,853 acres would be designated as wilderness and 1,477 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

9,853 acres

(recommended for wilderness)

1,477 acres

(recommended for nonwilderness)

The recommendation in this report is that 9,853 acres in the WSA be designated as wilderness and the remaining 1,477 acres be released for other uses. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The portion recommended for wilderness designation is the most rugged portion of the WSA which includes most of the best opportunities for solitude and primitive recreation, the highest scenic quality, and has less likelihood of being proposed for nonwilderness uses. The WSA is also unusual in that three ecosystem provinces are represented within a small, approximately 11,000-acre WSA.

Designation of the recommended portion of the WSA would exclude Areas A, B, and C that may be proposed by St. George for municipal water development. The majority of the area recommended for nonwilderness lacks outstanding opportunities for solitude and primitive recreation. Diversity of terrain and vegetation is limited. A large groundwater source is available in the area for use in nearby communities.

3. CRITERIA CONSIDERED IN RECOMMENDING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Almost all of the WSA is natural, that is, with no noticeable imprints caused by human activity. For some users of the WSA, the value of the naturalness characteristic increases with the knowledge that this undisturbed WSA is adjacent to I-15 and the nearby St. George urban area. One imprint is a water well just inside the southwest edge of the WSA, which was authorized by the BLM to provide municipal water to the City of St. George. BLM believes that the action did not permanently impair wilderness values. The well and associated structures are to be removed and the site restored to an unnoticeable condition.

B. Solitude

About 5,200 acres (46 percent of the WSA) meet the criteria for outstanding opportunities for solitude. Approximately 4,800 acres are in the portion recommended for wilderness designation. The upper parts of the main canyons, divides between canyons, and some of the lower rim areas provide screening and a sense of isolation.

Although the remaining 6,130 acres of the WSA do not meet the standards for outstanding opportunities for solitude, the sights and sounds of human activity are not obtrusive in most parts of the WSA. A few small aircraft fly over the WSA almost every day and traffic on I-15 is visible from the higher parts of the study area.

COTTONWOOD CANYON WILDERNESS STUDY AREA

C. Primitive and Unconfined Recreation

Hiking is the primitive recreational activity with outstanding opportunities. About 16 percent (1,800 acres) of the WSA is terrain suitable for hiking. About 1,600 of these acres are in the portion recommended for designation. The best opportunities for hiking are in the eastern half of the WSA in the Cottonwood Canyon-Heath Canyon area. Opportunities are outstanding in the western portion as well, but in a smaller area. The remaining 9,530 acres of the WSA do not exhibit outstanding opportunities for recreation.

D. Special Features

All of the WSA exhibits outstanding visual quality. Red sandstone exposures in approximately 5,300 acres of the WSA have weathered into rounded forms and alcoves which contrast aesthetically with the dark colors of the nearby Pine Valley Mountains.

The endangered purple-spined hedgehog cactus (Echinocerus engelmannii var. purpureus) may grow in the WSA. This plant is proposed by the U.S. Fish and Wildlife Service (FWS) for removal from the list of endangered species because of taxonomic uncertainties. However, the endangered bald eagle and peregrine falcon may occasionally visit the WSA. Both species have been sighted in the vicinity. Nesting sites of the sensitive prairie falcon and golden eagle have been reported in the WSA.

FWS candidate threatened or endangered species that may inhabit the WSA include the desert tortoise, Merriam's kangaroo rat, Virgin River montane vole, ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, mountain plover, western snowy plover, western yellow-billed cuckoo, and Great Basin Silverspot butterfly.

Gila monsters and chuckawallas inhabit rocky shelves and canyons of the WSA. Because of their restricted occurrence in Utah, these large lizards are included on the Utah State Sensitive Species List, and the gila monster is also a candidate species for listing as threatened or endangered. Southern Utah is the

northernmost extent of both lizards' range.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

The Cottonwood Canyon WSA is in a transition zone between the American Desert, Colorado Plateau, and Intermountain Sagebrush Province/Ecoregions.

The potential natural vegetation (PNV) for the WSA, which is the vegetation type that would develop if the WSA remained undisturbed, is 5,330 acres of juniper-pinyon woodland and 6,000 acres of blackbrush. Juniper-pinyon woodland occupies 2,000 acres in the American Desert Province, 1,000 acres in the Intermountain Sagebrush Province, and 2,330 acres in the Colorado Plateau Province. Blackbrush would be evenly distributed among the three provinces, with 2,000 acres in each.

Wilderness designation of part of this WSA would add an ecosystem (blackbrush) that is not presently represented in the NWPS, although it is represented in BLM study areas outside of Utah. The WSA is also unusual in that three provinces are represented within a small area.

This information is summarized in Table 2 from information compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of the population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The Cottonwood Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

COTTONWOOD CANYON WILDERNESS STUDY AREA

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,152,407
Blackbrush	0	0	0	0
NATIONWIDE (AMERICAN DESERT PROVINCE)				
Juniper-Pinyon Woodland	1	21,485	24	705,611
Blackbrush	0	0	0	0
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,141,675
Blackbrush	0	0	11	228,064
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,955	13	257,933
Sagebrush/Blackbrush	0	0	0	0
UTAH (AMERICAN DESERT PROVINCE)				
Juniper-Pinyon Woodland	0	0	0	0
Blackbrush	0	0	0	0
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,073,868
Blackbrush	0	0	11	228,064

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	55	2,176,498

Source: BLM File Data.

COTTONWOOD CANYON WILDERNESS STUDY AREA

It would, however, add an unusual combination of PNV ecosystems to the NWPS (see "Expanding the Diversity of Natural Systems. . .").

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah and in Arizona and Nevada, the adjacent states nearest the WSA. Ten designated wilderness areas are within 100 miles of the WSA. In a clockwise direction, beginning to the north, are the 50,000-acre Pine Valley Mountain Wilderness (Forest Service [FS]), the 7,000-acre Ashdown Gorge Wilderness (FS), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), and to the south, the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), and the 37,300-acre Grand Wash Cliffs Wilderness (BLM). No designated wilderness areas are within 100 miles to the west of the WSA, however.

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be managed as wilderness to preserve values now present in the area. No non-Federal land is within the recommended portion, and no proposals for any kind of use or development have been made that would conflict with wilderness management.

The portion of the WSA that is not recommended for wilderness designation could be managed as wilderness. Municipal water development for the City of St. George; current, relatively light off-road vehicular recreation; and uranium exploration are all more likely to be proposed or to occur in the nondesignated portion than in the area recommended for designation. If the area was designated as wilderness, these uses could be denied or managed without degrading the existing wilderness character. If demand for the all-terrain vehicle (ATV) type of ORV use increased significantly for the area recommended for nondesignation, it would be administratively difficult to effectively man-

age that area to preserve wilderness character.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Cottonwood Canyon WSA (USGS Bulletin 1746-C, B.B. Houser, et al., 1988). The mineral resource study included the 9,853-acre portion of the WSA that is recommended for wilderness designation. The report indicates that there are inferred subeconomic resources of building stone silica sand, and limestone at the surface. There is moderate mineral resource potential for silver, copper, gold, uranium, and vanadium beneath the study area. The resource potential for all other metallic minerals and for oil and gas is low. The energy resource potential for low-temperature geothermal sources is high. There is no energy resource potential for coal.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 31 inputs specifically addressing this WSA were received from 33 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual

COTTONWOOD CANYON WILDERNESS STUDY AREA

was credited with one signature or testimony regardless of the number on inputs.

In general, 24 commenters supported wilderness designation for part or all of the WSA, while four commenters were opposed. Seven commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented on the wilderness values in the WSA. The majority of those commenting in favor of wilderness were from outside of Utah, but nearly as many were from rural Utah.

Those opposing wilderness were concerned that wilderness would inhibit flood and erosion control and interfere with water rights. Most of the commenters were local and rural.

One Federal agency, USBM, commented on the Draft EIS. The USBM noted that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. These findings have been incorporated into the Final EIS and study report.

No comment letters were received on the Final EIS.

There are no State in-holdings in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State noted that both wilderness quality and the degree of conflict were considered moderate except for a potential serious water development conflict with the city of St. George. The State believes that the recommended 9,583-acre wilderness alternative would mitigate most conflicts except perhaps the water development conflict. The State recommends that an additional assessment of community water needs and the water resource be conducted prior to any wilderness designation. The State also notes that gas company reports indicate that the WSA has potential for hydrocarbon reservoirs.

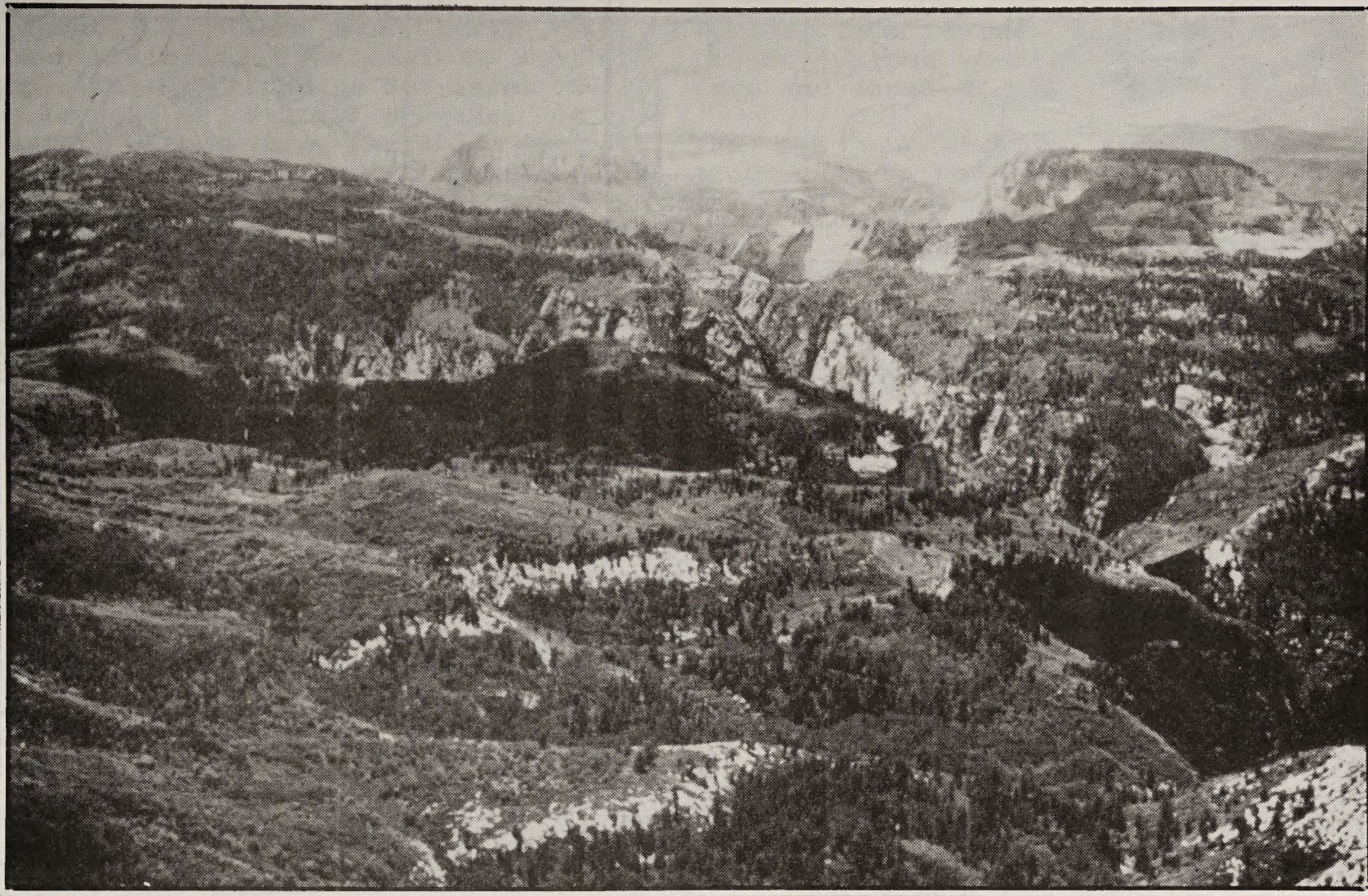
The Washington County Commission is opposed to wilderness designation of the Cottonwood Canyon WSA. The Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. The Commission commented that the WSA contains substantial and necessary culinary water sources for six local municipalities in Washington County.

COTTONWOOD CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

		Alternatives	
		Recommendation Partial Wilderness (9,853 Acres)	No Action/No Wilderness
Issue Topics			All Wilderness (11,330 Acres)
Impacts on Wilderness Values	Wilderness values would be preserved overall in the designated area which is about 87 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 13 acres of the WSA. Opportunities for solitude and primitive recreation would be indirectly reduced in quality on as much as 567 acres. Special features will be preserved except where scenic values would be directly lost on 13 acres with a perceived loss of scenic quality on as much as 567 acres surrounding the disturbance.	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 25 acres of the WSA. Opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 1,133 acres of the WSA. The disturbance would result from uranium exploration and development of rights-of-way. Special features would not be significantly affected except for direct loss of scenic quality on 25 acres and a perceived loss of scenic quality on as much as 1,133 acres surrounding the disturbance.	Wilderness values would be preserved overall in the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 5 acres of the WSA in spite of wilderness designation, due to valid existing rights. The disturbance would result from uranium exploration. Opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 340 acres of the WSA. Special features would be preserved except where scenic values would be directly reduced in quality on 5 acres with a perceived loss of quality on as much as 340 acres surrounding the disturbance.
Impacts on Water Resources	The most favorable area for development of the aquifer would be in the nondesignated portion of the WSA and therefore, available as a municipal water source.	Existing and future use of the water resource in the WSA by the City of St. George would not be affected by implementation of the No Action/No Wilderness Alternative.	Implementation of this alternative would remove 460 acre-feet of water from the City of St George municipal water system annually. Additional potential water sources located in the WSA would also be foregone.
Impacts on Mineral and Energy Exploration and Production	Due to the small size of potential leasable and locatable mineral deposits in the designated portion of the WSA, it is concluded that implementation of this alternative would not result in a significant mineral resource loss. Leasable and locatable mineral resources could be explored and developed in the nondesignated portion of the WSA.	Implementation of the No Action/No Wilderness Alternative would not adversely affect mineral exploration or production.	Wilderness designation would eliminate or severely constrain potential exploration opportunities for uranium in the WSA. Loss of exploration and development opportunities for other mineral and energy resources would not be significant.

LaVerkin Creek Canyon WSA

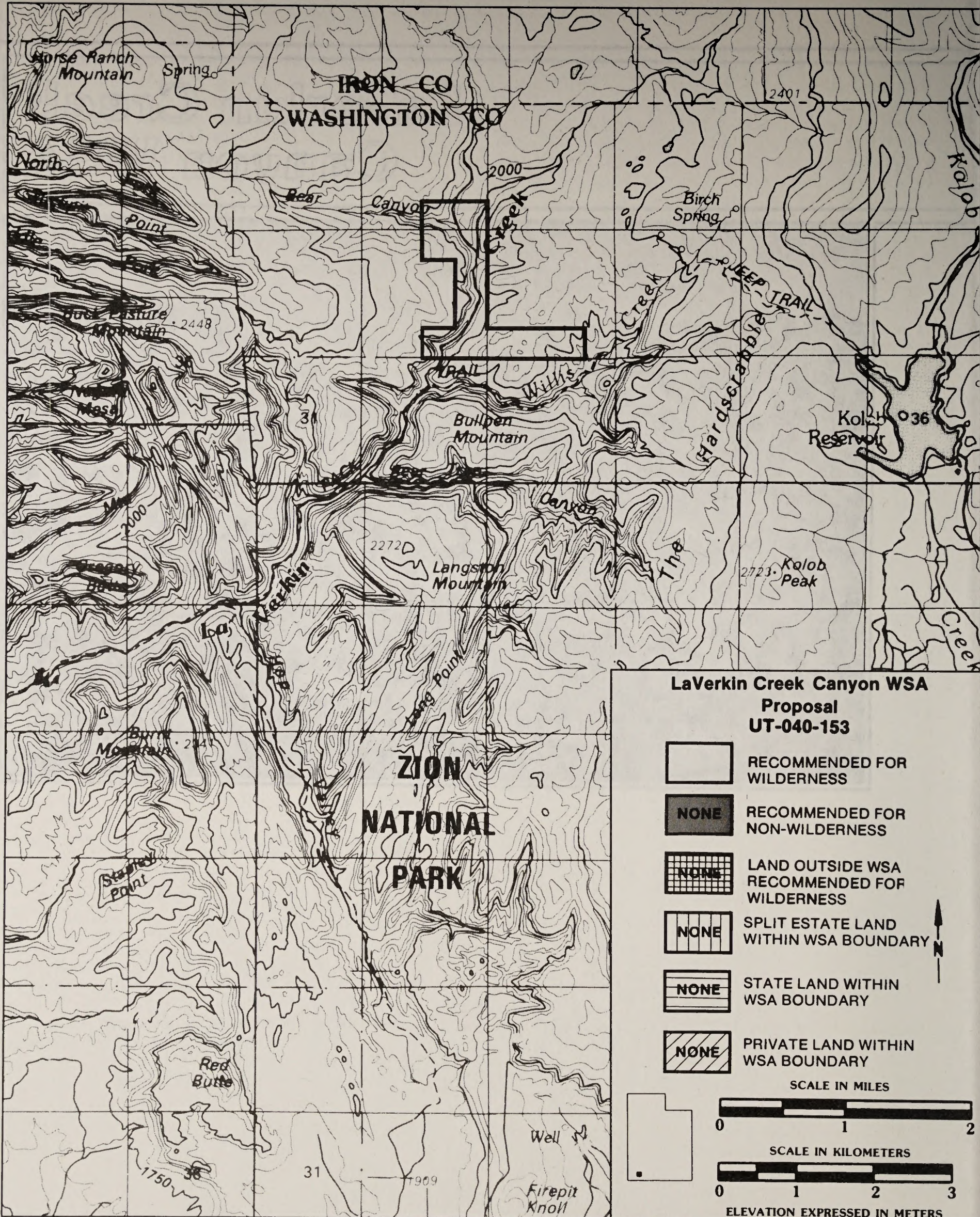


LAVERKIN CREEK CANYON WSA

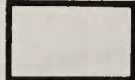

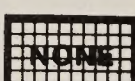
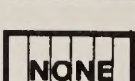
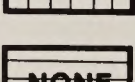
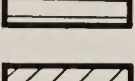
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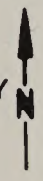
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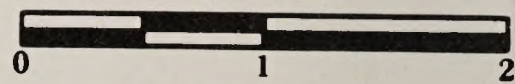


LaVerkin Creek Canyon WSA Proposal UT-040-153

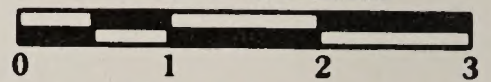
-  RECOMMENDED FOR WILDERNESS
-  NONE RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS

LAVERKIN CREEK CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 567 acres

The LaVerkin Creek Canyon Wilderness Study Area (WSA) (UT-040-153) is in northeastern Washington County, on the north boundary of Zion National Park and adjacent to a National Park Service (NPS) administratively endorsed wilderness proposal encompassing 120,620 acres. The study area is an "L" shaped unit, about 1.5 miles from north to south and 1.5 miles from east to west (see Map). The WSA contains 567 acres of public lands; no State, private, or split-estate lands are included (see Table 1). The study area is bounded on the south by NPS lands and on all other sides by private land.

The LaVerkin Creek Canyon WSA is on the Kolob Terrace, a high regional ledge in the "Grand Staircase", a series of step-like terraces at the southern edge of the High Plateaus Section of the Colorado Plateau Physiographic Province. The study area is predominantly a 1.5 mile long canyon cut by LaVerkin and Bear Creeks. The canyon is in sandstone and is 700 to 900 feet deep. Vegetation varies from brush and grasses and pinyon-juniper woodland to mixed conifers and aspen at higher elevations.

The WSA was dropped from wilderness study status in December, 1982 due to its small size.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	567
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	567
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	567
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	567
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

Because of its wilderness values, the WSA was studied under Section 202 of the

Federal Land Policy and Management Act (FLPMA) and was included in the Utah

LAVERKIN CREEK CANYON WILDERNESS STUDY AREA

Bureau of Land Management (BLM) State-wide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this report, and a no wilderness (no action) alternative.

2. RECOMMENDATION AND RATIONALE:

567 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate the entire study area as wilderness. This is the environmentally preferable alternative, as it would result in the least change from the natural environment over the long term. Little or no conflict with other uses exists.

The WSA is small but can be effectively managed as wilderness. Although it is small, it is an extension of the high wilderness values found on adjacent NPS administered land in Zion National Park. The WSA has exceptional scenic values and cannot be visually distinguished from the adjacent National Park.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The WSA basically appears as an untouched deep canyon system with outstanding scenic values equal in quality to those of Zion National Park. No known disturbance has occurred within the WSA since the wilderness inventory, and the imprint of man is substantially unnoticeable.

B. Solitude

The narrow, sheer-walled canyons of the WSA extend into Zion National Park and offer opportunities for solitude. The unit by itself is not considered to have

outstanding opportunities for solitude, but the combination of adjacent NPS lands with the WSA does offer outstanding opportunities for solitude.

C. Primitive and Unconfined Recreation

The canyon floors of LaVerkin Creek and Bear Canyon offer opportunities for hiking, backpacking, horseback riding, and photography. The WSA by itself does not have outstanding opportunities for primitive and unconfined recreation but would if managed in conjunction with the proposed wilderness area in Zion National Park.

D. Special Features

All of the WSA has exceptional scenic values. This WSA is an area with cougar which is a wildlife species associated with wilderness. The WSA may be habitat for or be visited by two endangered bird species (bald eagle and peregrine falcon) and 13 other animal and four plant species that are considered sensitive. Although these species add to the wilderness values of the WSA, they are not confined to the LaVerkin Creek Canyon study area. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems that is not presently represented in the NWPS, although one (Arizona pine forest) is not represented in the NWPS in Utah.

PNV is the vegetation that would develop if the area remains undisturbed. The WSA is in a transition zone between the Rocky Mountain Forest Province/Ecoregion and the Colorado Plateau Province/Ecoregion. The PNV types are juniper-pinyon woodland (360 acres) and Arizona pine forest (207 acres). Both types are well represented in other BLM WSAs, although

LAVERKIN CREEK CANYON WILDERNESS STUDY AREA

all WSAs with Arizona pine forest PNV are in Utah.

This information is summarized in Table 2 from information compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of the population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The LaVerkin Creek Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. Its inclusion would, however, add a PNV ecosystem (Arizona pine forest) (see "Expanding the Diversity of Natural Systems . . .") which is not now represented in the NWPS in Utah.

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada. Twelve designated wilderness areas are within 100 miles of the WSA.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (ROCKY MOUNTAIN PROVINCE)				
Juniper-Pinyon Woodland	2	41,451	19	167,276
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	3	26,300	8	19,843
UTAH (ROCKY MOUNTAIN PROVINCE)				
Juniper-Pinyon Woodland	0	0	3	46,708
UTAH (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	0	0	8	19,843

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	55	2,176,498

Source: BLM File Data.

LAVERKIN CREEK CANYON WILDERNESS STUDY AREA

In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall the WSA could be effectively managed to preserve its wilderness character. Administration of visitor access in Bear Creek and LaVerkin Creek Canyons would be difficult at the points where these canyons cross the boundary between private and BLM lands. Visitor use can be monitored and controlled through cooperative effort by BLM and NPS.

The WSA receives relatively little use. One grazing permittee utilizes 20 animal unit months (AUMs) of forage a year, and recreational visitors spend about 100 visitor days annually in the WSA. There are no private or State in-holdings to interfere with wilderness management, and there are no mineral leases, mining claims or other valid rights in the WSA.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Laverkin Creek Canyon WSA (USGS Bulletin 1746-E, R.E. Van Loenen, et al., 1989). The report indicates that the mineral and energy potential for oil and gas is moderate, but is low for all metals and for geothermal sources. No resource potential exists for undiscovered coal or for undiscovered gypsum.

Subeconomic resources of common-variety sandstone and inferred subeconomic re-

sources of limestone are within the WSA, but these commodities have low unit value and similar materials are available elsewhere in the region closer to transportation and to markets.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values. Wilderness values are considered to be the only pertinent resource that would be significantly affected by designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 33 inputs specifically addressing this WSA were received from 47 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 41 commenters supported wilderness designation for part or all of the WSA, while two commenters were opposed. Four commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented on the wilderness values in the WSA and how wilderness designation would complement wilderness proposals for adjacent portions of Zion National Park. The major-

LAVERKIN CREEK CANYON WILDERNESS STUDY AREA

ity of those commenting in favor of wilderness were from outside of Utah.

Those opposing wilderness were concerned that the WSA is too small to be designated as wilderness. Both commenters were from rural Utah.

Two Federal agencies, the USBM and NPS, commented on the Draft EIS for this WSA. The USBM indicated that the Draft EIS was written without the findings of the USGS and USBM mineral reports, and that the reports would be ready for use in the Final EIS. Their report was utilized in preparation of the Final EIS and study report. The USBM also stated that BLM had underestimated the petroleum potential of the WSA.

The NPS supported wilderness designation for the WSA, and provided information on potential for endangered species in the area.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the LaVerkin Creek Canyon WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, The Watchman, Taylor Creek Canyon, Goose Creek Canyon, and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study should be given to the potential of transferring most of these WSAs from BLM to NPS management. The BLM and NPS agree that transferral of administration is a separate issue, independent of the wilderness review.

The LaVerkin Creek Canyon WSA is in Washington County. The Washington County Master Plan identifies the WSA an open

space zone, and the Washington County Commission has indicated that they do not support wilderness designated for this WSA. The County Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS, a County Commissioner stated that the LaVerkin Creek Canyon WSA is an isolated parcel of BLM land that should be transferred to the jurisdiction of the NPS.

LAVERKIN CREEK CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives

Recommendation
All Wilderness
(567 Acres)

No Action/No Wilderness

Issue Topics

Impacts on
Wilderness
Values

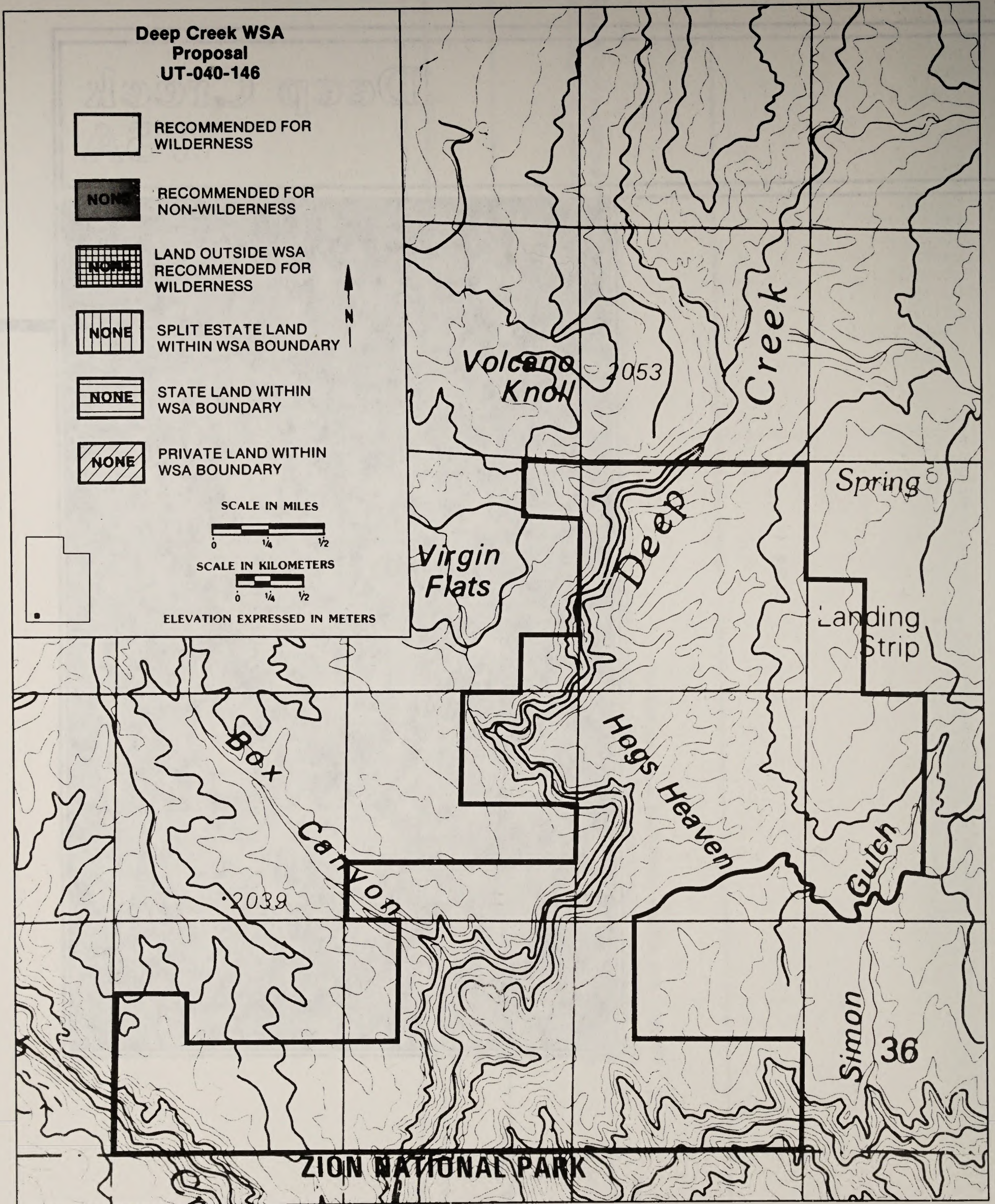
Wilderness designation would preserve wilderness values of naturalness, outstanding opportunities for solitude and primitive recreation, and special features including Class A scenery, special status species, and wildlife associated with wilderness.

Wilderness values would not be protected by wilderness designation. In the foreseeable future, no disturbance is anticipated that would affect wilderness values.

Deep Creek WSA



DEEP CREEK WSA



T. 3

DEEP CREEK WILDERNESS STUDY AREA

1. THE STUDY AREA: 3,320 acres

The Deep Creek Wilderness Study Area (WSA) (UT-040-146) is in northeastern Washington County and adjoins the northern boundary of Zion National Park for three miles. The study area is shaped like a letter "L" turned to the left, and is 3 miles from northwest to southeast and 3 miles across (see Map). The WSA encloses 3,320 of public land administered by the Bureau of Land Management (BLM) but no State, private, or split-estate lands. The unit is nearly surrounded by private lands, except on the south (see Table 1). The WSA is comprised of a vertical-walled section of Deep Creek Canyon almost 2,000 feet deep.

The WSA also contains portions of the canyons of the North Fork of the Virgin River and Kolob Creek. Dominant vegetative types are pinyon-juniper woodland, coniferous, and riparian, with an intermixed variety of forbs, grasses, and shrubs.

The WSA was dropped from wilderness study status in December, 1982 due to its small size, but because of its wilderness values the WSA was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN WILDERNESS STUDY AREA	ACRES
BLM (surface and subsurface)	3,320
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	3,320
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within WSA)	3,320
BLM (outside WSA)	0
Split-Estate (within WSA)	0
Split-Estate (outside WSA)	0
Total BLM land recommended for wilderness	3,320
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this re-

port, and a no wilderness (no action) alternative.

DEEP CREEK WILDERNESS STUDY AREA

2. RECOMMENDATION AND RATIONALE:

3,320 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation in this report is to designate the entire study area as wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change in natural environment over the long term. Little or no conflict with other uses exists.

The WSA is small but can be effectively managed as wilderness. Although it is small, it is an extension of the high wilderness values found on adjacent NPS administered land in Zion National Park. The WSA has exceptional scenic values and cannot be visually distinguished from the adjacent National Park.

The WSA includes a variety of wilderness values of high quality. Designation of the WSA would add two potential ecosystems which are not now represented in the National Wilderness Preservation System in Utah (see "Expanding the Diversity of Natural Systems . . .").

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. All of the WSA is in a natural condition.

The WSA basically appears as an untouched deep canyon system with outstanding scenic values equal in quality to those of Zion National Park.

B. Solitude

Opportunities for solitude are available throughout the WSA in the deep, serpentine canyons of Deep Creek, the North Fork and Kolob Creek, which essentially compose the whole study area. Vegetation

in the canyons provides additional screening. Combined with the opportunities available in the adjacent Zion National Park, the opportunity to seek and experience solitude is outstanding.

C. Primitive and Unconfined Recreation

The canyon bottoms provide unconfined recreation opportunities for backpacking, bird watching, and photography. These opportunities are outstanding in quality when considered as opportunities in association with the adjacent canyons in Zion National Park. For example, the Deep Creek and North Fork of the Virgin River Canyons are associated with the 18-mile North Fork of the Virgin River hiking route through the Zion Narrows.

D. Special Features

The landscapes in the WSA are natural extensions of Zion National Park. The abundance of water in deep canyons provides for a wide variety of ecological zones with unusual fauna and flora.

The WSA may be habitat for or be visited by two endangered bird species (bald eagle and peregrine falcon) and 13 animal and four plant species that are considered sensitive (refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information). Although these species add to the wilderness values of the WSA, they are not confined to the Deep Creek study area.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS, but it would add two ecosystems or a combination of ecosystems not represented in the NWPS in Utah. The WSA is in a transition zone between the Colorado Plateau Province/Ecoregion and the Rocky Mountain Forest Province/Ecoregion and has a combination of four PNV types.

DEEP CREEK WILDERNESS STUDY AREA

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference. The PNV types in the WSA are Arizona pine forest (1,160 acres in the Colorado Plateau Province and 1,150 acres in the Rocky Mountain Forest Province) and mountain mahogany-oak scrub (500 acres each in both Provinces). Neither of the PNV types in the Colorado Plateau Province is represented in the NWPS in Utah. All other WSAs in which these PNV types would occur are represented are in Utah, however.

This information is summarized in Table 2, from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within 5-hours drive of Las Vegas.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	3	26,300	8	18,880
Mountain Mahogany-Oak Scrub	0	0	4	31,361
NATIONWIDE (ROCKY MOUNTAIN PROVINCE)				
Arizona Pine Forest	2	24,902	3	83
Mountain Mahogany-Oak Scrub	7	80,852	5	32,970
UTAH (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	0	0	8	18,880
Mountain Mahogany-Oak Scrub	0	0	4	31,361
UTAH (ROCKY MOUNTAIN PROVINCE)				
Arizona Pine Forest	2	24,902	3	83
Mountain Mahogany-Oak Scrub	7	80,852	1	4,845

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	55	2,176,498

Source: BLM File Data.

DEEP CREEK WILDERNESS STUDY AREA

C. Balancing the Geographic Distribution of Wilderness Areas

The Deep Creek WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. Including the Deep Creek WSA in the NWPS would, however, contribute to the diversity of wilderness areas in Utah by providing an unusual combination of potential natural vegetation ecosystems (see Expanding the Diversity of Natural Systems . . .").

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada. Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall the WSA could be effectively managed to preserve its wilderness character. Administration of visitor access would be difficult because the WSA is partially surrounded by private lands. Visitor use can be monitored and controlled through cooperative effort by BLM and National Park Service (NPS). BLM has or is in the process of acquiring three easements across private land which will allow public access to the west side of the WSA.

The WSA receives relatively little use. Three grazing permittees utilize 201 animal unit months (AUMs) of forage a year, and recreational visitors spend about 2,000 visitor days annually in the

WSA. There are no private or State in-holdings to interfere with wilderness management, and there are no mineral leases, mining claims or other valid rights in the WSA.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Deep Creek WSA (USGS Bulletin 1746-E, R.E. Van Loenen, et al., 1989). The report indicates that the mineral and energy potential for oil and gas is moderate, but is low for all metals and for geothermal sources. No resource potential exists for undiscovered coal or for undiscovered gypsum.

Subeconomic resources of common-variety sandstone and inferred subeconomic resources of limestone are within the WSA, but these commodities have low unit value and similar materials are available elsewhere in the region closer to transportation and to markets.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values. Wilderness values are considered to be the only pertinent resource that would be significantly affected by designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 49 inputs specifically addressing this WSA were received from 66 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was

DEEP CREEK WILDERNESS STUDY AREA

considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 59 commenters supported wilderness designation for part or all of the WSA, while 6 addressed the relative merits of the EIS but took no formal position on wilderness designation. One of the commenters was opposed to wilderness designation.

Those favoring wilderness commented on the wilderness values present in the WSA and how designation would complement management of adjacent lands in Zion National Park. The majority of those commenting in favor of wilderness were from outside of Utah. Of particular concern was the need to protect wildlife, wildlife habitat, and other resource values.

The commenter who opposed wilderness designation was concerned that wilderness would preclude public access and constrain livestock management. The commenter was from rural Utah and was affiliated with grazing.

Two Federal agencies, the USBM and NPS, commented on the Draft EIS for the Deep Creek WSA. The USBM indicated that the Draft EIS was written without the findings of the USGS and USBM mineral reports, and that the reports would be ready for use in the Final EIS. Their report was utilized in preparation of the Final EIS. The USBM also stated that BLM had underestimated the petroleum potential of the WSA.

The NPS supported wilderness designation for the WSA, provided information on potential for endangered species in the area, noted the need to address Deep Creek as a Nationwide Rivers Inventory stream, and questioned changes in forage allocations in the WSA between 1982 and publication of the Draft EIS.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS, the

State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the Deep Creek WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, The Watchman, Taylor Creek Canyon, Goose Creek Canyon, and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study should be given to the potential of transferring most of these WSAs from BLM to NPS management. The BLM and NPS agree that transferral of administration is a separate issue, independent of the wilderness review.

The Deep Creek WSA is in Washington County. The Washington County Master Plan identifies the WSA as an open space zone, and the Washington County Commission has indicated that they do not support wilderness designation for this WSA. The County Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS, the county has stated that the WSA should be transferred from BLM to NPS jurisdiction through legislative enactment of a park expansion bill.

DEEP CREEK WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives	
Issue Topics	No Action/No Wilderness
<p>Recommendation All Wilderness (3,320 Acres)</p>	
<p>Impacts on Wilderness Values</p>	<p>Wilderness values would not be protected by wilderness designation. In the foreseeable future, no disturbance is anticipated that would affect wilderness values. This alternative would not complement wilderness management goals of the NPS on contiguous lands. Wild and scenic river values of two river segments would not receive additional protection.</p>

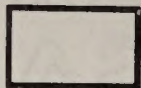
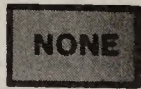

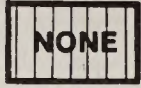
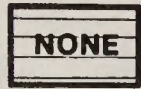
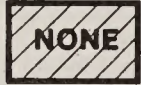
North Fork Virgin River WSA

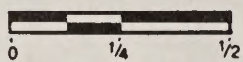
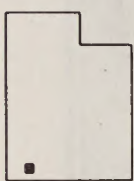


NORTH FORK VIRGIN RIVER WSA

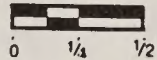
North Fork Virgin River WSA

Proposal UT-040-150

-  RECOMMENDED FOR WILDERNESS
-  NONE RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY

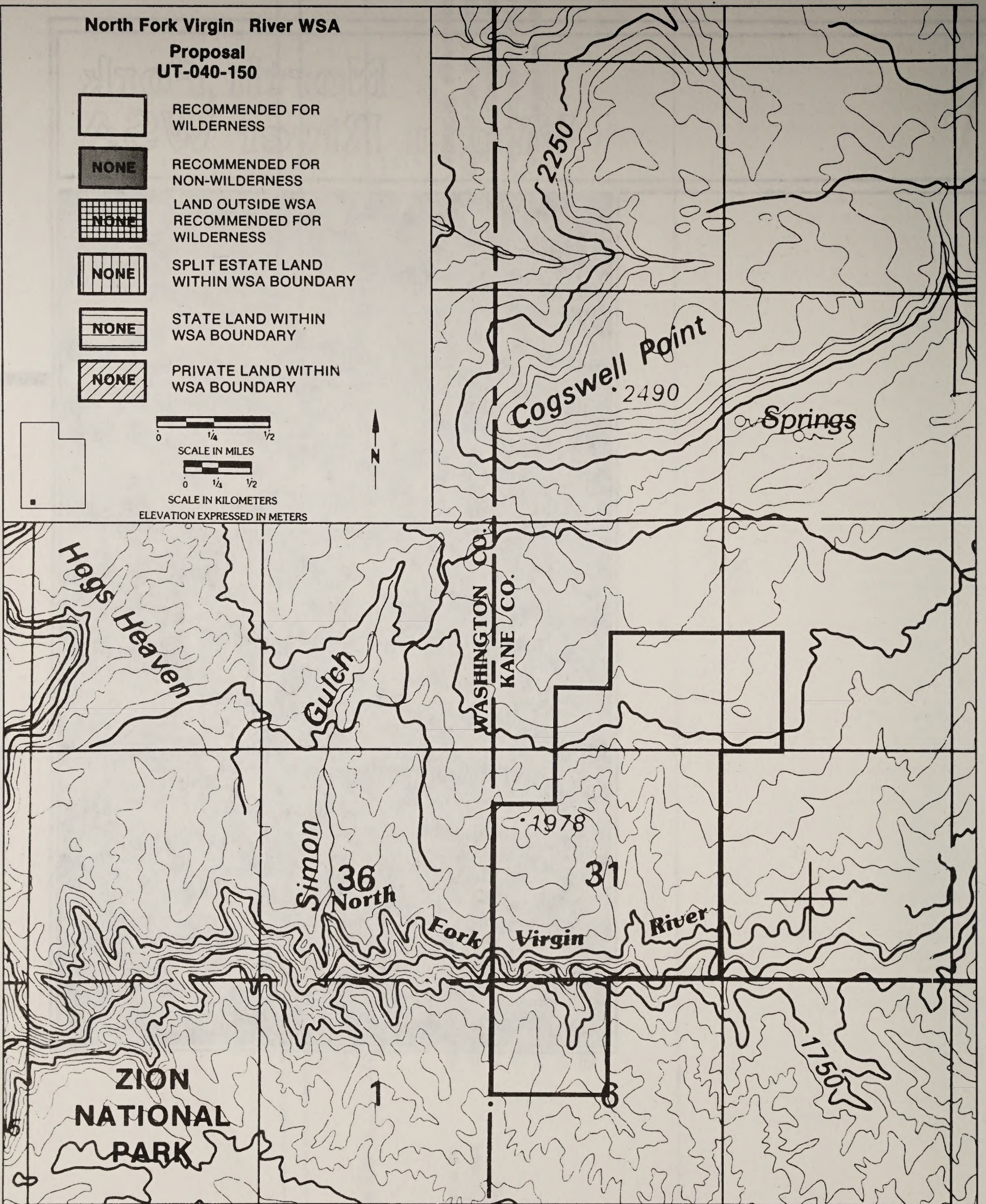


SCALE IN MILES



SCALE IN KILOMETERS

ELEVATION EXPRESSED IN METERS



T. 30

T. 40

NORTH FORK VIRGIN RIVER WILDERNESS STUDY AREA

1. THE STUDY AREA: 1,040 acres

The North Fork Virgin River Wilderness Study Area (WSA) (UT-040-150) is in western Kane County along the eastern boundary of Zion National Park, about 45 miles from Kanab, Utah (population 2,148). The unit is 2 miles long from north to south and 1 mile wide, east to west (see Map). The WSA is entirely public land administered by the Bureau of Land Management (BLM) and does not include any State, private, or split-estate lands (see Table 1). The study area is bordered entirely by State and private land, except on the southwest where it adjoins Zion National Park for 0.50 mile.

The WSA is in the Grand Staircase, the southern end of the High Plateaus Section of the Colorado Plateau Physiographic Province.

The North Fork of the Virgin River flows eastward through a canyon in the southern part of the WSA. The segment of the Virgin River within the WSA is 1.5 miles long. Elevations range from about 5,400 feet on the canyon floor to 6,900 feet in the northern part of the WSA. Most of the area is covered by mountain shrub vegetation, consisting of pinyon, juniper, scrub oak, other kinds of brush, and bunch grasses. The remainder of the WSA is dominated by pinyon-juniper woodland with brush, forbs, and some Ponderosa pine.

The study area was dropped from wilderness status by the Secretary of the Interior in December, 1987, due to its small size, but because of its wilderness values and proximity to Zion National Park it was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA).

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	1,040
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	1,040
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	1,040
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	1,040
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

NORTH FORK VIRGIN RIVER WILDERNESS STUDY AREA

The study area was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this report, and a no wilderness (no action) alternative.

2. RECOMMENDATION AND RATIONALE:

1,040 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation in this report is to designate the entire area as wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. Little or no conflict with other uses exists.

The WSA is small but can be effectively managed as wilderness. Although it is small, it is an extension of the high wilderness values found on an adjacent National Park Service (NPS)-administered land in Zion National Park. The WSA has exceptional scenic values and cannot be visually distinguished from the adjacent National Park.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The WSA basically appears as an untouched bench cut by a deep canyon system with outstanding scenic values equal in quality to those of Zion National Park. The area is covered with mountain shrubs intermixed with pinyon and juniper trees and some Ponderosa pine. The WSA is essentially natural.

A vehicular way traverses the northwestern portion of the area for 0.25 mile. It provided access to a timber harvest

area outside the unit and is occasionally used to monitor livestock. The way is not maintained, however, and is substantially unnoticeable.

B. Solitude

About 150 acres (14 percent of the WSA) on the canyon floor provide outstanding opportunities for solitude. Screening by vegetation and terrain is excellent, as the canyon floor is well below the upper benchlands, the canyon is sinuous, and thick vegetation covers parts of the canyon floor.

The remaining portion of the WSA slopes gently southward and provides little topographic screening.

C. Primitive and Unconfined Recreation

Much the same land, about 150 acres, provides outstanding opportunities for primitive and unconfined recreation, especially backpacking, bird watching, photography, and sightseeing. The North Fork of the Virgin River WSA is part of the upper access to the deep, very narrow Zion Narrows gorge which is a major attraction in Zion National Park.

Approximately 1.6 miles of the 13-mile hike to the Zion Narrows trailhead are within the WSA.

The upper benchlands, comprising the remaining 86 percent of the WSA, do not provide opportunities for recreational activities comparable to the Zion Narrows hike.

D. Special Features

The endangered bald eagle and peregrine falcon; as well as 12 additional animal species and four plant species that are considered to be sensitive, occur or may occur in the WSA. Elk and cougar also use the WSA. Although these species add to the wilderness values of the WSA, they are not confined to the North Fork Virgin River study area.

Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

NORTH FORK VIRGIN RIVER WILDERNESS STUDY AREA

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a potential natural vegetation (PNV) ecosystem that is not presently represented in the NWPS or other BLM study areas outside of Utah. The WSA is in the Colorado Plateau/Ecoregion. Juniper-pinyon woodland, the PNV that would develop if the WSA remained undisturbed, is represented in the NWPS in Utah in one area (Box-Death Hollow Wilderness, Dixie National Forest) and is represented in 53 other BLM study areas in Utah. This information is summarized in Table 2 from information compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of this population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The North Fork of the Virgin River WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV) NATIONWIDE (COLORADO PLATEAU PROVINCE)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Juniper-Pinyon Woodland	11	1,401,745	84	2,142,965
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,657,895

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	55	2,176,498

Source: BLM File Data.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751

-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS

NORTH FORK VIRGIN RIVER WILDERNESS STUDY AREA

and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall, the WSA could be effectively managed to preserve its wilderness character. Visitor access to the North Fork of the Virgin River canyon could become a manageability problem because the canyon enters private lands at both the upstream and downstream boundaries to the WSA. Visitor use associated with the Zion Narrows hike can be monitored and controlled through the cooperative efforts of the BLM and NPS.

The WSA receives relatively little grazing use. Two grazing permittees utilize 17 animal unit months (AUMs) of forage a year. Recreational use is higher, with recreational visitors spending about 4,000 visitor days annually in the WSA. There are no private or State inholdings to interfere with wilderness management, and there are no mineral leases in the WSA. Approximately eight mining claims cover 160 acres in the WSA, but there are no prospects, deposits or any other evidence of mineralization known to occur in the area. There are no other valid rights in the study area.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the North Fork Virgin River WSA (USGS Bulletin 1746-E, R.E. Van Loenen, et al., 1989). The report indicates that the mineral and energy potential for oil and gas is moderate, but is low for all metals and for geothermal sources. No resource potential exists for undiscovered coal or for undiscovered gypsum.

Subeconomic resources of common-variety sandstone and inferred subeconomic resources of limestone are within the WSA,

but these commodities have low unit value and similar materials are available elsewhere in the region closer to transportation and to markets.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values which is considered to be the only pertinent resource that would be significantly affected by designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 41 inputs specifically addressing this WSA were received from 49 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 39 commenters supported wilderness designation for part or all of the WSA, while one commenter was opposed. Nine commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented on the primitive recreational opportunities and special features. Those favoring wilderness in their comments were almost evenly divided among rural and urban Utah and those from outside the state. Of particular concern was the need to

NORTH FORK VIRGIN RIVER WILDERNESS STUDY AREA

protect wilderness values and complement proposed NPS Wilderness.

The commenter opposing wilderness was concerned that wilderness would preclude mineral exploration, cause problems in water rights and use, conflict with other land use plans, and also stated that the WSA lacks naturalness.

Two Federal agencies, the USBM and NPS, commented on the Draft EIS for the North Fork Virgin River WSA. The USBM indicated that the Draft EIS was written without the findings of the USGS and USBM mineral reports, and that the reports would be ready for use in the Final EIS. Their report was utilized in preparation of the Final EIS and study report.

The NPS supported wilderness designation for the WSA and provided information on the potential for endangered species in the area.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the North Fork Virgin River WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, The Watchman, Taylor Creek Canyon, Goose Creek Canyon, and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study should be given to the potential of transferring most of these WSAs from the BLM to the NPS management. The BLM and NPS agree that transferral of administration is a separate issue, independent of the wilderness review.

The North Fork Virgin River WSA is in Kane County. The Kane County Master Plan supports the total concept of multiple

use of lands and rejects wilderness as an exclusionary recreational form that cannot be used by the average recreation visitor. The County Commission has indicated that they do not support wilderness designation for this WSA. In commenting on the Draft EIS, Kane County opposed designation of the North Fork Virgin River WSA and questioned its WSA status because it is less than 5,000 acres.

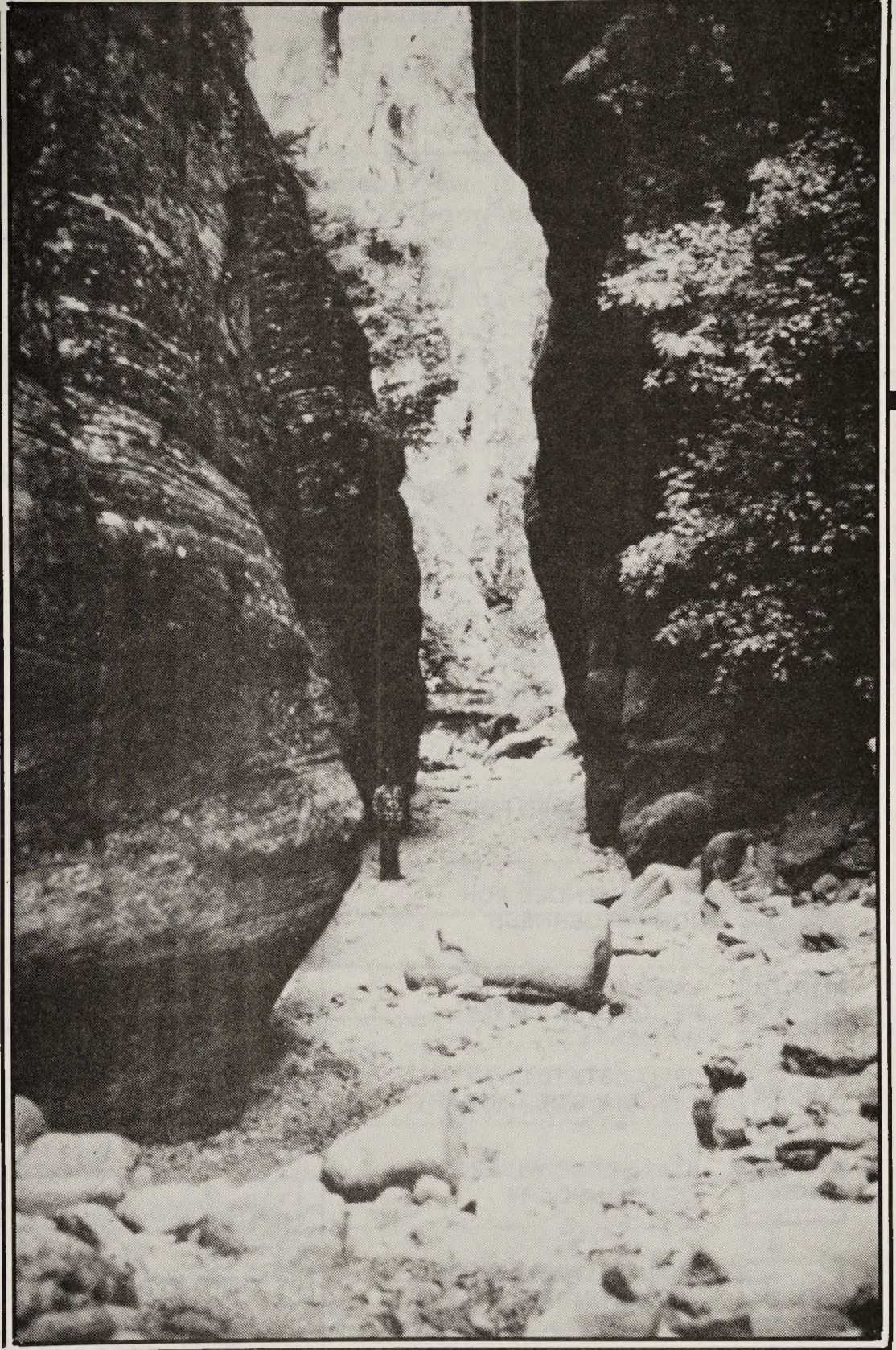
The Washington County Water Conservancy District has identified and conducted limited feasibility studies on a reservoir site immediately upstream of the WSA on the North Fork of the Virgin River. The Conservancy District opposes wilderness designation of the WSA because it could affect the potential for construction of the reservoir. BLM's position is that reservation of water is already required for Zion National Park downstream of the WSA, and that wilderness designation would not significantly add to the constraints already placed on the river.

NORTH FORK VIRGIN RIVER WSA

Table 4
Comparative Summary of impacts by Alternative

Alternatives	
Issue Topics	No Action/No Wilderness
<p>Recommendation All Wilderness (1,040 Acres)</p>	
<p>Impacts on Wilderness Values</p>	<p>The WSA would not be protected by wilderness designation. No disturbance that would affect wilderness values would be expected in the foreseeable future. This alternative would not complement the NPS wilderness proposal on adjacent lands. Wild and scenic values of the North Fork of the Virgin River would not be provided additional protection. Vehicular use of a 0.25 mile of way would continue to occasionally detract from opportunities for solitude and primitive recreation.</p>

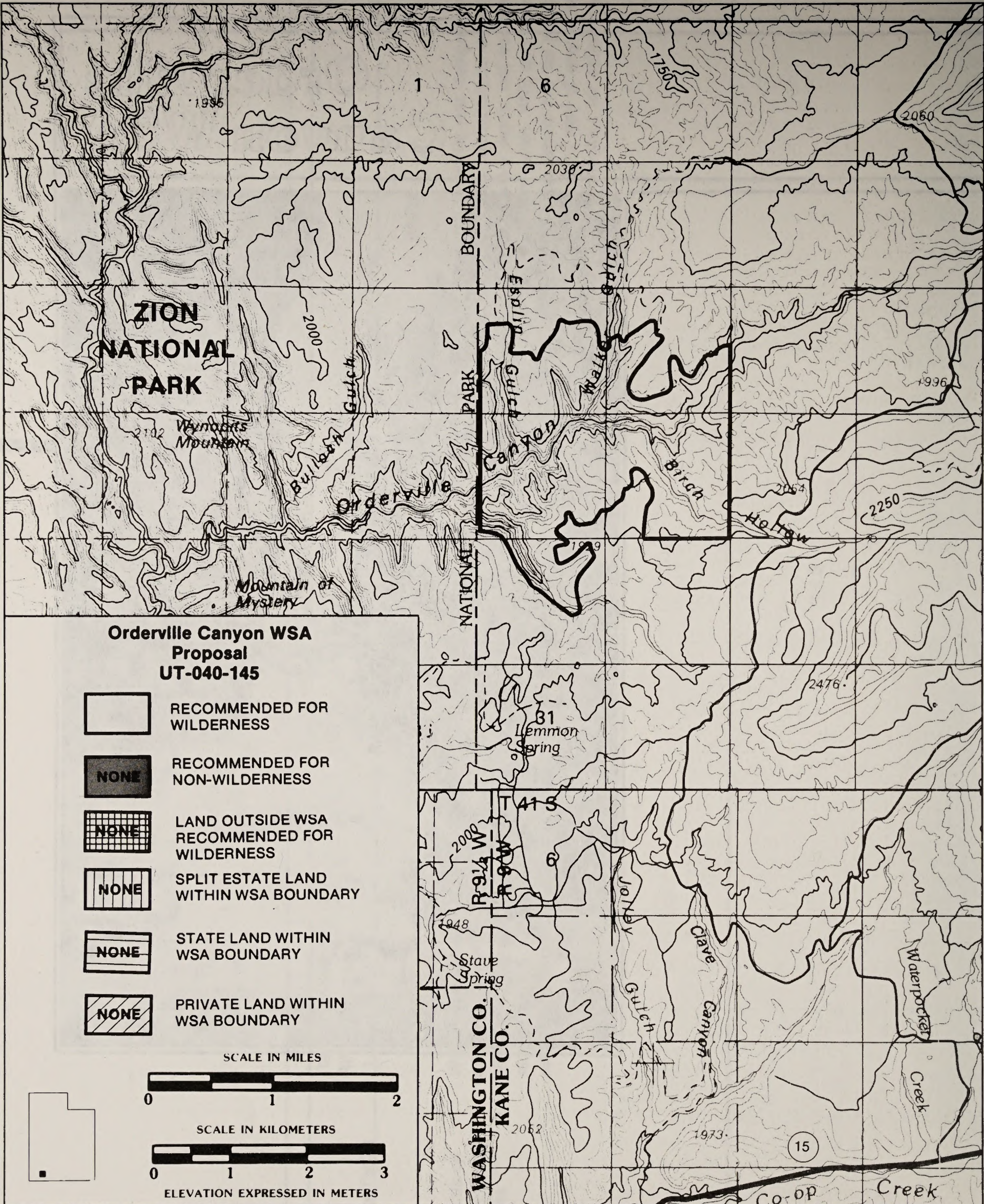
Orderville Canyon WSA



ORDERVILLE CANYON WSA

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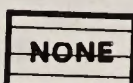
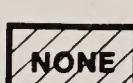
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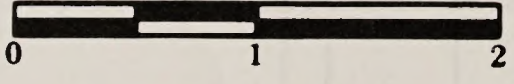
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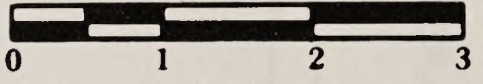
Orderville Canyon WSA Proposal UT-040-145

-  RECOMMENDED FOR WILDERNESS
-  NONE RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY

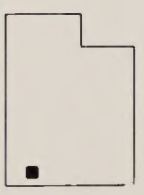
SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS



ORDERVILLE CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 1,750 acres

The Orderville Canyon Wilderness Study Area (WSA) (UT-040-145) is in western Kane County along the eastern boundary of Zion National Park, about 40 miles from Kanab, Utah (see Map). The WSA is entirely public land administered by the Bureau of Land Management (BLM). The WSA does not include any State, private, or split-estate lands (see Table 1). The study area is bordered by private land on the east. On the north and south, the boundary generally excludes the old logging areas and logging trails found at the edges of the upper canyon rims. The boundary is contiguous with the boundary of Zion National Park for about 1.5 miles.

The WSA is on the Grand Staircase at the southern end of the High Plateaus section of the Colorado Plateau Physiographic Province.

The WSA constitutes a 2-mile long segment of the upper Orderville Canyon (Orderville Gulch) and its several tributary canyons. Orderville Canyon falls upon a nearly exact east-west axis in the study area. Elevations range from about 5,100 feet on the canyon floor to 6,600 feet at the southwest edge of the WSA. Most of the area is covered by pinyon-juniper woodland with a sparse understory of brush, forbs, and grasses. The remainder of the WSA is dominated by mountain shrub.

The study area was dropped from wilderness status by the Secretary of the Interior in December, 1987, due to its small size, but because of its wilderness values and proximity to Zion National Park, including a National Park Service (NPS) endorsed wilderness proposal of 120,620 acres, it was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA).

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN WILDERNESS STUDY AREA	ACRES
BLM (surface and subsurface)	1,750
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	1,750
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within WSA)	1,750
BLM (outside WSA)	0
Split-Estate (within WSA)	0
Split-Estate (outside WSA)	0
Total BLM land recommended for wilderness	1,750
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

ORDERVILLE CANYON WILDERNESS STUDY AREA

The study area was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this report, and a no wilderness (no action) alternative.

2. RECOMMENDATION AND RATIONALE:

1,750 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation in this report is to designate the study area as wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. Little or no conflict with other uses exists.

The WSA is small but can be effectively managed as wilderness. Although it is small, it is an extension of the high wilderness values found on adjacent NPS administered land in Zion National Park. Although the WSA has exceptional scenic values, these values are not as high as those displayed inside the National Park in the extremely rugged lower canyon as it confluences with the Zion Narrows of the North Fork of the Virgin River.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable.

The WSA is in a natural condition. The WSA is an untouched deep canyon system with outstanding scenic values reminiscent of those of Zion National Park. The topography is rugged.

The majority of the vegetation cover is pinyon-juniper woodland with scattered Ponderosa pine. Cottonwood trees and

mountain shrubs grow in the canyon bottoms.

No surface-disturbing activities have occurred since the wilderness inventory in 1980.

B. Solitude

The opportunity to experience outstanding solitude is available in the deeply entrenched Orderville Canyon on 1,167 acres.

Some of the side canyons are narrow and moderately vegetated with oak brush, Ponderosa pine, and pinyon and juniper, providing both topographic and vegetative screening.

The upper bench areas, comprising about 583 acres (33 percent of the WSA) do not offer comparable outstanding opportunities for solitude.

C. Primitive and Unconfined Recreation

Outstanding opportunities for backpacking, rock climbing, and sightseeing are available on about 1,167 acres (about 67 percent) of the WSA. Hiking and backpacking opportunities are associated with Zion National Park opportunities. Orderville Canyon is a route variation of the Zion Narrows hike of the North Fork of the Virgin River in the National Park.

The remaining 583 acres of the WSA lacking canyons do not provide outstanding opportunities for primitive and unconfined recreation.

D. Special Features

The endangered bald eagle and peregrine falcon, as well as 13 additional animal species and four plant species that are considered to be sensitive, occur or may occur in the WSA (see Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS). Cougar also use the WSA. Although these species add to the wilderness values of the WSA, they are not confined to the Orderville Canyon study area.

ORDERVILLE CANYON WILDERNESS STUDY AREA

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add an ecosystem that is not presently represented in the NWPS or other BLM study areas outside of Utah. This WSA is in the Colorado Plateau Province/Ecoregion. Juniper-pinyon woodland, the potential natural vegetation (PNV) that would develop if the WSA remained undisturbed, is represented in the NWPS in Utah in one wilderness area (Box-Death Hollow Wilderness, Dixie National Forest) and is represented in 53 other BLM study areas. This information is summarized in Table 2, from information compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of Las Vegas.

C. Balancing the Geographic Distribution of Wilderness Areas

The Orderville Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada.

**TABLE 2
ECOSYSTEM REPRESENTATION**

	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
BAILEY-KUCHLER CLASSIFICATION (PNV)				
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,142,255
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,704,448

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREA	ACRES
Las Vegas, Nevada	38	3,132,130	55	2,176,498

Source: BLM File Data.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilder-

ness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre

ORDERVILLE CANYON WILDERNESS STUDY AREA

Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall the WSA could be effectively managed to preserve its wilderness character. Visitor access to Orderville Canyon and most of its tributary canyons is from private and public lands adjacent to the North Fork road and presently does not constitute a manageability problem. Visitor use associated with the Orderville Canyon route version of the Zion Narrows hike can be monitored and controlled through the cooperative efforts of the BLM and NPS.

The WSA receives relatively little grazing use. Two grazing permittees utilize 24 animal unit months (AUMs) of forage a year in the WSA. Recreational visitors spend between 500 and 1,000 visitor days annually in the WSA. Most of this use is in conjunction with use of Zion National Park. The WSA provides an access point to the park. There are no private or State in-holdings to interfere with wilderness management, and there are no mineral leases in the WSA. There is one mining claim in the WSA, but there are no prospects, deposits or any other evidence of mineralization known to occur in the area. There are no other valid rights in the study area.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the Bureau of Mines (USBM) prepared a mineral assessment report for the Orderville Canyon WSA (USGS Bulletin 1746-E, R.E. Van Loenen, et al., 1989). The report indicates that the mineral and energy potential for oil and gas is moderate, but is low for all metals and for geothermal sources. No resource potential exists for undiscovered coal.

Inferred, subeconomic deposits of about 20 million tons of surface-minable gypsum and of common sandstone and limestone are present within the WSA.

Subeconomic resources of common-variety sandstone and inferred subeconomic resources of limestone are within the WSA, but these commodities have low unit value and similar materials are available elsewhere in the region closer to transportation and to markets.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values. These values are considered to be the only pertinent resource that would be significantly affected by designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 54 inputs specifically addressing this WSA were received from 62 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 55 commenters supported wilderness designation for part or all of the WSA, while six addressed the relative merits of the EIS but took no formal position on wilderness designation. One of the commenters was opposed to wilderness designation.

ORDERVILLE CANYON WILDERNESS STUDY AREA

Those favoring wilderness commented on the wilderness values, including special features and opportunities for primitive recreation. The majority of those commenting in favor of wilderness were from rural and urban Utah and outside the state, in almost equal numbers. Of particular concern was the need to protect wilderness values and to complement proposals for wilderness in the adjacent Zion National Park.

Two Federal agencies, the USBM and NPS, commented on the Draft EIS for the Orderville Canyon WSA. The USBM indicated that the Draft EIS was written without the findings of the USGS and USBM mineral reports, and that the reports would be ready for use in the Final EIS. Their report was utilized in preparation of the Final EIS. The USBM also stated that BLM had underestimated the petroleum potential of the WSA.

The NPS supported wilderness designation for the WSA, provided information on potential for endangered species in the area and questioned changes in forage allocations and mining claims in the WSA between 1982 and publication of the Draft EIS.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the Orderville Canyon WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, The Watchman, Taylor Creek Canyon, Goose Creek Canyon and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study should be given to the potential of transferring most of these WSAs from BLM to NPS management. The BLM and NPS agree

that transferral of administration is a separate issue, independent of the wilderness review.

The State also suggested wording changes in the geology section of the EIS.

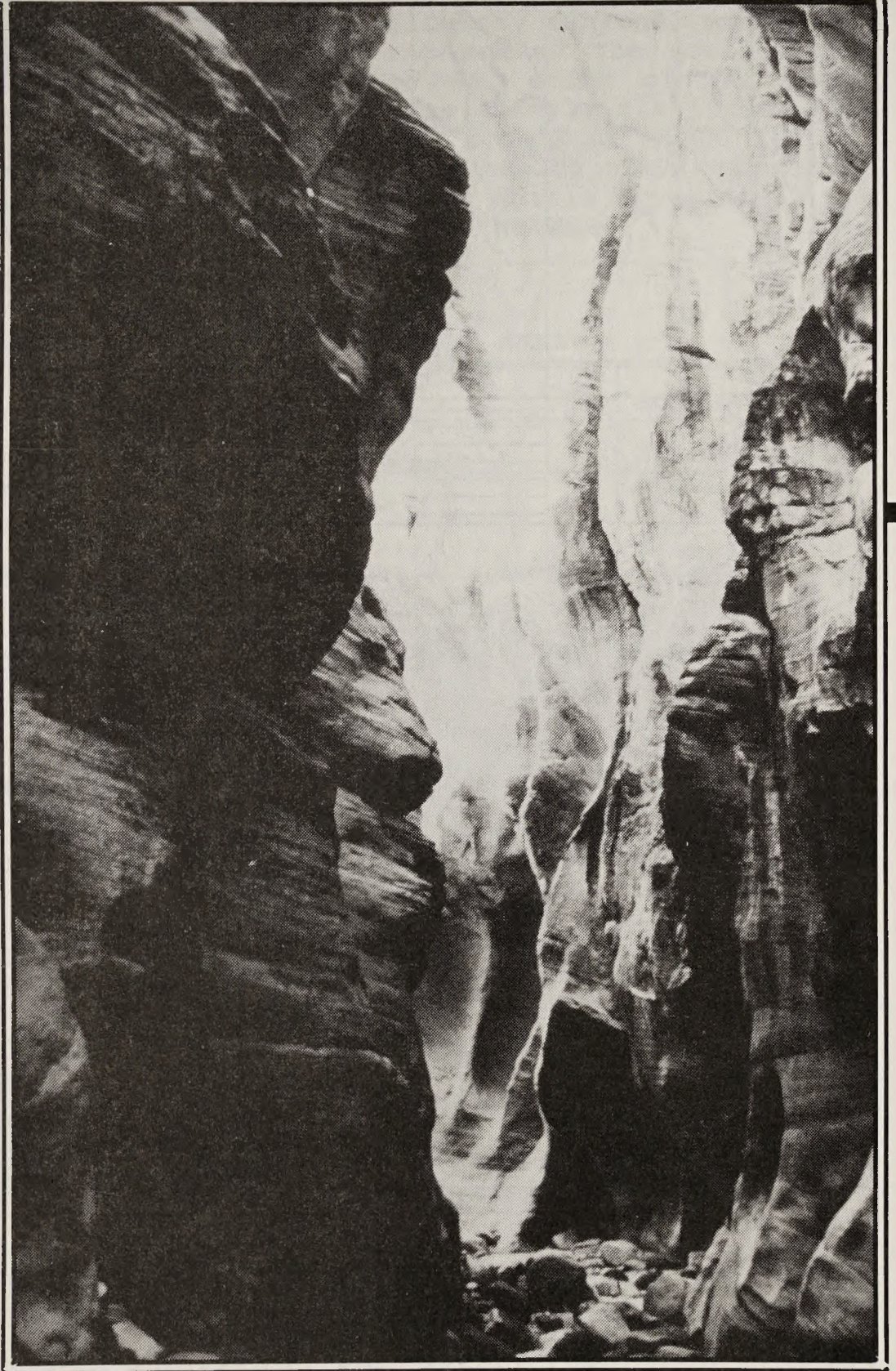
The Orderville Canyon WSA is in Kane County. The Kane County Master Plan supports the total concept of multiple use of lands and rejects wilderness as an exclusionary recreational form that cannot be used by the average recreation visitor. The County Commission has indicated that they do not support wilderness designation for this WSA. In commenting on the Draft EIS, Kane County opposed designation of the WSA and questioned its WSA status because it is less than 5,000 acres. They suggested that inclusion of the Orderville Canyon WSA in a national park expansion bill would be the most appropriate management measure.

ORDERVILLE CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives	
Issue Topics	No Action/No Wilderness
<p>Recommendation All Wilderness (1,750 Acres)</p>	
<p>Impacts on Wilderness Values</p>	<p>Wilderness values would not be protected by wilderness designation. No disturbance that would significantly affect wilderness values is projected in the foreseeable future. This alternative would not complement the NPS wilderness proposal for the contiguous portion of Zion National Park.</p>

Parunuweap Canyon WSA



PARUNUWEAP CANYON WSA

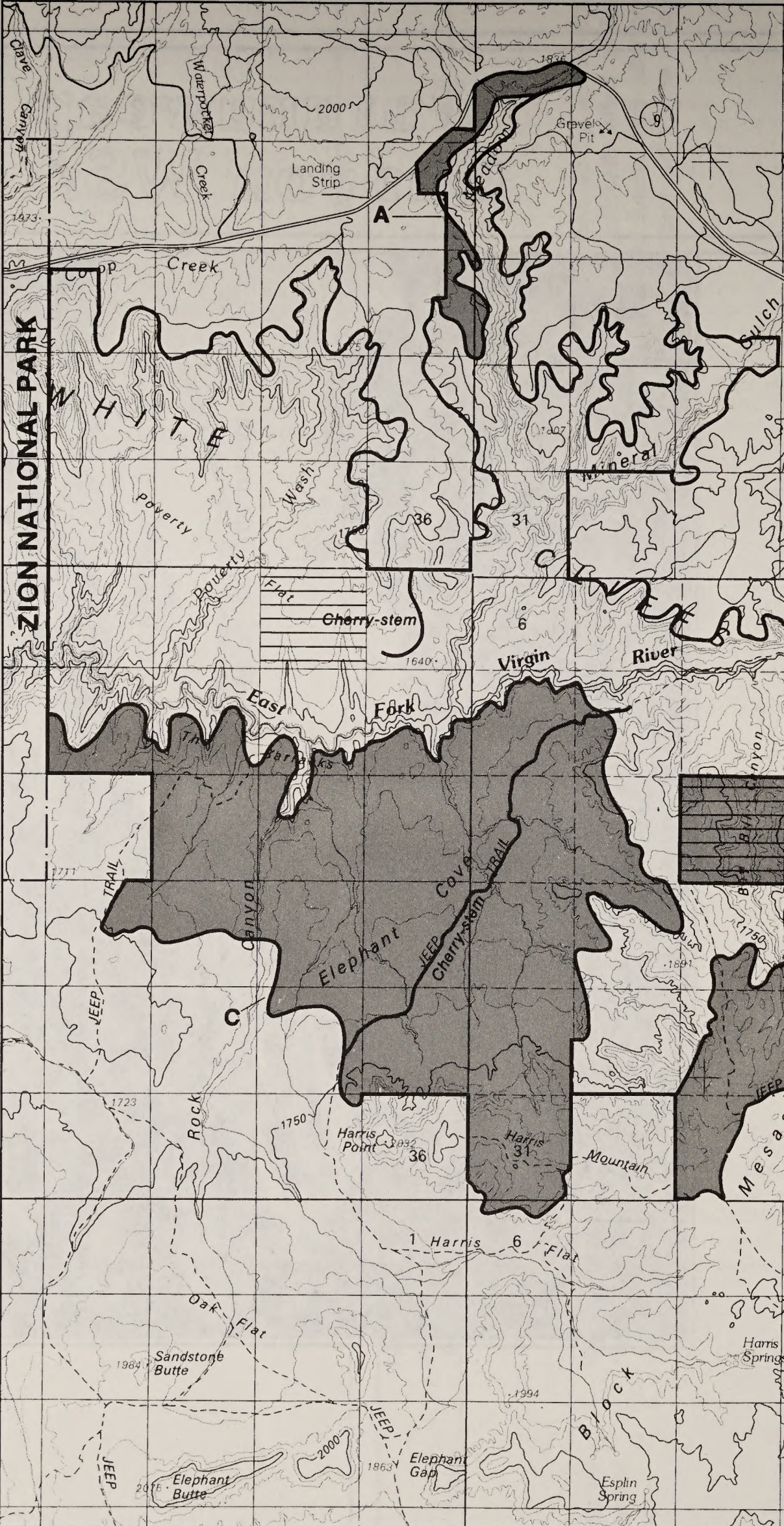
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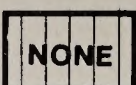
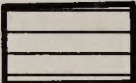

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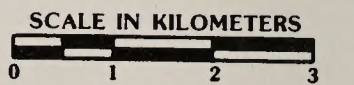
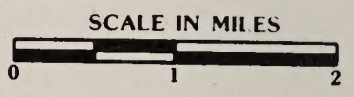
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Parunuweap Canyon WSA Proposal

UT-040-230

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS

PARUNUWEAP CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 30,800 acres

The Parunuweap Canyon Wilderness Study Area (WSA) (UT-040-230) is in western Kane County, about 25 miles northwest of Kanab, Utah (population 2,148). The WSA is an irregularly shaped unit, 10 miles at the maximum from north to south and 10 miles from east to west. The study area includes 30,800 acres of public land administered by the Bureau of Land Management (BLM) (see Map). Two sections (1,253 acres) of State land are inside the WSA boundaries (see Table 1). No private or split-estate lands are within the study area. The western boundary of the WSA is contiguous with Zion National Park for approximately 4.8 miles.

The northern boundary is partly along fields, chainings, and topographic contours and partly along the periphery of State and private lands. The southern boundary generally follows roads. The WSA includes the portion of the East Fork of the Virgin River between Mt. Carmel Junction and Zion National Park. The area is characterized by the main, east-west oriented canyon (Parunuweap) and steep tributary canyons, surrounded by buttes and mesas. The southwestern part of the WSA, south of Parunuweap Canyon, is a relatively flat area. Elevations range from about 4,800 feet in the East Fork of the Virgin River Canyon to 6,600 feet on Harris Mountain at the southern end of the WSA.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	30,800
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	1,253
Total	32,053
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	17,888
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	17,888
In-holdings (State, private)	613
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	12,912
Split-Estate	0
Total BLM land not recommended for wilderness	12,912
In-holdings (State, Private)	640

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

PARUNUWEAP CANYON WILDERNESS STUDY AREA

Vegetation is almost entirely pinyon-juniper woodland with a sparse understory of shrubs, and a few scattered stands of Ponderosa pine.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

Four alternatives were analyzed in the EIS: a partial wilderness where 17,888 acres would be recommended as wilderness and 12,912 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; an all wilderness alternative; and a smaller partial wilderness alternative of 7,400 acres.

2. RECOMMENDATION AND RATIONALE:

- 17,888 acres
(recommended for wilderness)
- 12,912 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 17,888 acres in the WSA as wilderness and to release the remaining 12,192 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The 17,888-acre wilderness alternative is recommended because it would include the best wilderness values of the WSA and exclude Areas A, B, and C in which possible developments, including 300 acres of land treatment for rangeland improvement, are proposed. The recommended alternative would also exclude all State lands except for one section (see Table 1). The recommended area includes the site of a proposed reservoir for the East Fork of the Virgin River. Wilderness designation would prevent development of the reservoir. However, the reservoir may not be constructed regardless of wilderness des-

ignation because of its close proximity to Zion National Park, problems regarding Federal water rights, and the endangered fish species in the Virgin River.

Wilderness designation would also complement the National Park Service (NPS) administratively endorsed wilderness proposal for the adjacent portion of Zion National Park (see Map) and the NPS preference that adjacent lands be managed in a manner consistent with wilderness preservation in the Park. Little or no conflicts with other uses exist, and the high wilderness potential in the recommended portion outweigh potential uses of other resources.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. More than 99 percent of the WSA meets the criteria for naturalness. Much of the WSA resembles the lands within the adjacent Zion National Park. The WSA exhibits naturalness that closely corresponds with the remote character of the southeastern area of the National Park. A total of 16 miles of ways and fences, reservoirs, and corrals are visible in the WSA, disturbing less than 1 percent of the area. In 1987, 10 to 12 acres of pinyon-juniper woodland was cleared in the eastern part of the WSA. This action trespassed from adjacent private land. The disturbance was reclaimed.

B. Solitude

Approximately 17,600 acres (57 percent of the WSA) provide opportunities for outstanding solitude. About 17,000 acres would be included in the portion recommended for wilderness designation.

Opportunities for solitude vary considerably within the WSA. In general, the deeper, more irregular canyons and areas of eroded sandstone offer the best opportunities for solitude, but small

PARUNUWEAP CANYON WILDERNESS STUDY AREA

areas with sand dunes and the more densely vegetated parts of the WSA also provide seclusion.

Some locations provide both topographic and vegetative screening from outside sights and sounds and other visitors.

Although solitude is present on the remaining 13,200 acres of the WSA, the opportunity is not considered to be of the exceptional quality found in the area adjacent to the National Park or in areas such as the Parunuweap Canyon on the East Fork of the Virgin River.

C. Primitive and Unconfined Recreation

Primitive recreation opportunities are outstanding on 17,500 acres, or 57 percent of the WSA.

About 17,000 acres are in the portion recommended for wilderness. Portions of the WSA are excellent for a diversity of recreational activities, including backpacking, rock climbing, photography, and sightseeing.

Hiking through Parunuweap Canyon and into Zion National Park is the objective of backpacking. Several access routes are possible through tributary canyons north and south of the main canyon. Rock climbing opportunities are best on the White Cliffs in the northern and eastern parts of the WSA and in The Barracks of the lower part of Parunuweap Canyon. Numerous scenic areas for sightseeing and photography include the main canyon and main tributaries, bare rock exposures adjacent to the National Park, and the White Cliffs. The opportunities for primitive recreation on the remaining 13,200 acres are not considered to be outstanding in the context of the exceptional opportunities present in the areas discussed above.

D. Special Features

Fifty-eight percent of the WSA (17,800 acres) is considered to exhibit outstanding scenic quality that is comparable to scenery in Zion National Park. About 14,100 acres are within the portion recommended for wilderness designation.

A major historical feature is the Elephant Gap or Foote Ranch Road, believed to follow the pioneer route between Pipe Springs, Arizona, and Long Valley, Utah. About 4.5 miles of this route are cherry-stemmed from the WSA and 4 miles are considered to be a way within the WSA.

The endangered bald eagle occasionally roosts in the WSA in winter. The endangered peregrine falcon may occasionally visit the WSA. The sensitive golden eagle may also sometimes inhabit or nest in the WSA.

Other sensitive U.S. Fish and Wildlife Service (FWS) candidate threatened or endangered animal species that may inhabit the WSA include Merriam's kangaroo rat, Virgin River montane vole, ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, mountain plover, western snowy plover, western yellow-billed cuckoo, Arizona Bell's vireo, white-faced ibis, and Great Basin Silverspot butterfly.

FWS candidate threatened or endangered plant species that may occur in the WSA are Asplenium andrewsii, Erigeron sionis, Heterotheca jonesii, and Sphaeromeria ruthiae. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS. The WSA is in the Colorado Plateau Province/Ecoregion. The PNV type in the WSA is juniper-pinyon woodland. This type is represented nationally in the NWPS, is widely represented in other BLM study areas both in and outside of Utah, and is represented in the NWPS in one wilderness in Utah. This information is summarized in Table 2 from data compiled in December 1989.

PARUNUWEAP CANYON WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,113,205
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,675,398

Source: BLM File Data.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Parunuweap Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada. Twelve designated wilderness areas are within 100 miles of the WSA.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,099,962	78	2,258,871
Provo-Orem, Utah	11	721,793	90	2,786,064
Las Vegas, Nevada	38	3,132,130	54	2,175,694

Source: BLM File Data.

In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,460-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre

Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,00-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be

PARUNUWEAP CANYON WILDERNESS STUDY AREA

managed as wilderness to preserve values now present in the area. Only one section of State land is within the recommended portion, but it is at the north-central edge of the recommended area and providing access would not present problems.

The Washington County Water Conservancy District has proposed a 40,000 acre-foot reservoir on the East Fork of the Virgin River within the WSA. Seven possible construction sites have been identified within the WSA. Preliminary studies of the project have been completed, but detailed feasibility and engineering studies have not been undertaken and applications have not been filed with the BLM. Wilderness designation would preclude construction within the WSA and wilderness designation of the adjacent portion of Zion National Park would prevent construction within that portion of the Park. Further, construction of a dam in these areas is unlikely because of the proximity of Zion National Park, because Federal reserved water rights are being asserted by the NPS downstream from the proposed sites and because there are endangered fish in the Virgin River downstream of the WSA.

No mineral leases or mining claims are held in the WSA. The portion recommended for wilderness designation would include a little more than half (184) of the 331 animal unit months of usable livestock forage, but wilderness designation would do little more than cause minor inconvenience to eight grazing permittees due to closure of ways. Livestock management would continue essentially as it is without affecting the wilderness qualities of the recommended area. Recreation management could also continue as at present. No other development proposals have been made for lands or resources within the proposed portion of the WSA.

The portion of the WSA that is not recommended for wilderness designation could also be managed as wilderness. Administration and control of such activities as off-highway vehicle use (OHV) and firewood cutting would be more difficult in this part of the WSA because it is flatter and more accessible than the recommended areas.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for this WSA (USGS Bulletin 1746-B, R.E. Van Loenen, et al., 1988). The report indicates that the mineral and energy potential for oil and gas is moderate, but is low for undiscovered resources of silver, uranium, coal, and geothermal energy. Six million tons of gypsum are just inside the northern boundary of the WSA, but this resource is unlikely to be developed because larger and more accessible deposits are known elsewhere in the region, including reserves just outside the study area. The likelihood of additional gypsum within the WSA is low. Large quantities of inferred common-variety sandstone, gravel, and limestone exist in the study area, but they are classified as inferred subeconomic resources.

Impacts on Resources

the comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 287 inputs specifically addressing this WSA were received from 302 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the

PARUNUWEAP CANYON WILDERNESS STUDY AREA

same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 274 commenters supported wilderness designation for part or all of the WSA while 14 commenters were opposed. Fourteen commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the wilderness values and special features in the WSA, how wilderness values in the WSA outweigh nonwilderness values, and the absence or relative lack of conflicts with mineral interests. The majority of those commenting in favor of wilderness were from outside the State, but significant numbers were from rural and urban Utah. Of particular concern was the need to complement proposed wilderness areas in adjacent Zion National Park and that BLM had overstated the problems of managing the area as wilderness.

Those opposing wilderness were concerned that wilderness designation would restrict access by the general public in favor of providing access for special groups, harm local economy, and cause water rights and use problems. The majority of those were from rural Utah.

Two Federal agencies, the NPS and USBM, commented on the Draft EIS. The NPS stated that either the all wilderness or large partial wilderness alternatives would afford the benefit of congruous NPS/BLM management. The NPS notes that the net effect would be greater protection of the Virgin River through Parunuweap Canyon because the NPS/BLM users of the canyon are typically one and the same.

The USBM noted that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1989. These findings have been incorporated into the Final EIS and study report.

No comment letters were received on the Final EIS.

There are two sections (1,253 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State noted that the WSA is considered to be the WSA with the highest wilderness values and highest conflicts in the region. The outstanding wilderness values associated with Parunuweap Canyon are among the best of their kind and these same resources create major conflicts associated with proposed dam sites in Parunuweap Canyon. The State noted that the high degree of controversy over the mutually exclusive land uses requires an extensive public input and analysis of the competing uses.

The Kane County Commission is opposed to wilderness designation of the Parunuweap Canyon WSA. The Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. The Commission commented that wilderness designation would preclude a proposed reservoir that is necessary to meet future irrigation needs of the rapidly expanding Washington County area. The Commission is also opposed to wilderness designation because "wilderness limits visitor utilization possibilities and rejects the multiple use concept."

PARUNUWEAP CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives

	Recommendation Large Partial Wilderness (17,888 Acres)	No Action/No Wilderness	All Wilderness (30,800 Acres)	Small Partial Wilderness (7,400 Acres)
Issue Topics				
Impacts on Wilderness Values	Wilderness values would be preserved in the designated area which is about 58 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be lost or reduced on up to 11 percent (3,387 acres) of the WSA, all in the nondesignated portion due to wildlife and rangeland developments and to ORV activity. Special features would not be significantly affected.	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be lost or reduced in quality on up to 3,387 acres of the WSA due to wildlife and rangeland developments, and to ORV activity. Special features would not be significantly affected.	Wilderness values would be preserved overall. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on 5 acres.	Wilderness values would be preserved in the designated area, which is about 25 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be lost or reduced on up to 11 percent (3,387 acres) of the WSA, all in the nondesignated portion, due to wildlife and rangeland developments and to ORV activity. Special features would not be significantly affected.
Impacts on Vegetation	Effects would be the same as for the No Action/No Wilderness Alternative because the same 307 acres of projected surface disturbance would occur in the WSA.	There would be no impacts on threatened, endangered, or other special status plant species because they do not occur in the areas where disturbance is projected. Projected surface disturbance on 307 acres would alter only about 1 percent of the pinyon-juniper woodland in the WSA.	There would be no significant impacts as vegetation would be provided additional protection from disturbance.	Effects would be the same as for the No Action/No Wilderness Alternative because the same 307 acres of projected surface disturbance would occur in the WSA.
Impacts on Water Resources	Effects on water quality and proposed water developments would be the same as with the No Action/No Wilderness Alternative because the proposed developments and related disturbance would occur in the nondesignated portion of the WSA. Water uses upstream of the WSA would not be affected because of existing requirements for flow downstream of the area.	Present water quality or uses would not be significantly affected in the foreseeable future because increases in sediment from projected disturbance would be small and temporary and water developments would continue under existing constraints.	Water quality would be maintained as at present because surface disturbance would be reduced. Construction of a livestock reservoir would not be allowed but water use upstream of the WSA would not be affected because of existing requirements for flow downstream of the area.	Effects would be the same as for the Large Partial Wilderness Alternative.

PARUNUWEAP CANYON WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
Recommendation		No Action/No Wilderness	All Wilderness	Small Partial Wilderness
		(17,888 Acres)	(30,800 Acres)	(7,400 Acres)
Issue Topics	Impacts on Wildlife Habitat and Populations	Impacts would be the same as with the No Action/No Wilderness Alternative.	Disturbance of 307 acres would temporarily disturb wildlife. However, the 300-acre vegetation treatment would provide additional browse for mule deer and ecotones for other species. Development of water sources would also benefit wildlife.	Designation would provide all species with additional protection from habitat disturbance and opportunities for solitude but would preclude benefits to big game from 300 acres of proposed habitat improvement.
	Impacts on Livestock Management	Impacts would be about the same as with the All Wilderness Alternative because access would be restricted on 7 of the 16 miles of existing ways. However, all proposed developments would be in the nondesignated area.	Livestock management and grazing levels would not be affected. Livestock distribution would be improved by range-land development.	Restrictions on access to 16 miles of ways would change livestock management and supervision and would inconvenience eight livestock permittees. A proposed reservoir that would improve livestock distribution would be foregone.
	Impacts on Recreation	The quality of primitive recreation opportunities would be protected and enhanced in the designated area, but adversely impacted in the nondesignated area due to continued ORV use. There would be some adverse impact to ORV use through closure of 7 miles of vehicular way. However, the Elephant Cove area would be available for ORV use. Both primitive and motorized recreational use would increase.	The quality of primitive recreation opportunities would be reduced on 11 percent (3,387 acres) by continued use of ORVs on existing routes and in the vicinity of Elephant Cove. Both primitive and motorized recreational use would increase but the quality of the primitive opportunity would decrease.	The quality of primitive recreation opportunities would be protected and enhanced in the designated area but would be adversely impacted in the nondesignated area due to continued ORV use. There would be a slight adverse impact to ORV use with the closure of 2 miles of vehicular way. The Elephant Cove area would continue to be available for ORV use. Both primitive and motorized recreational use would increase.

PARUNUWEAP CANYON WILDERNESS STUDY AREA

Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 42 S., R. 9 W., Sec. 2	613.24		State	No	Exchange		\$2,000

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

CANAAN MOUNTAIN WSA

Canaan Mountain WSA



CANAAN MOUNTAIN WSA

T. 42 S.

T. 43 S.

T. 42 N.

R. 9 W.

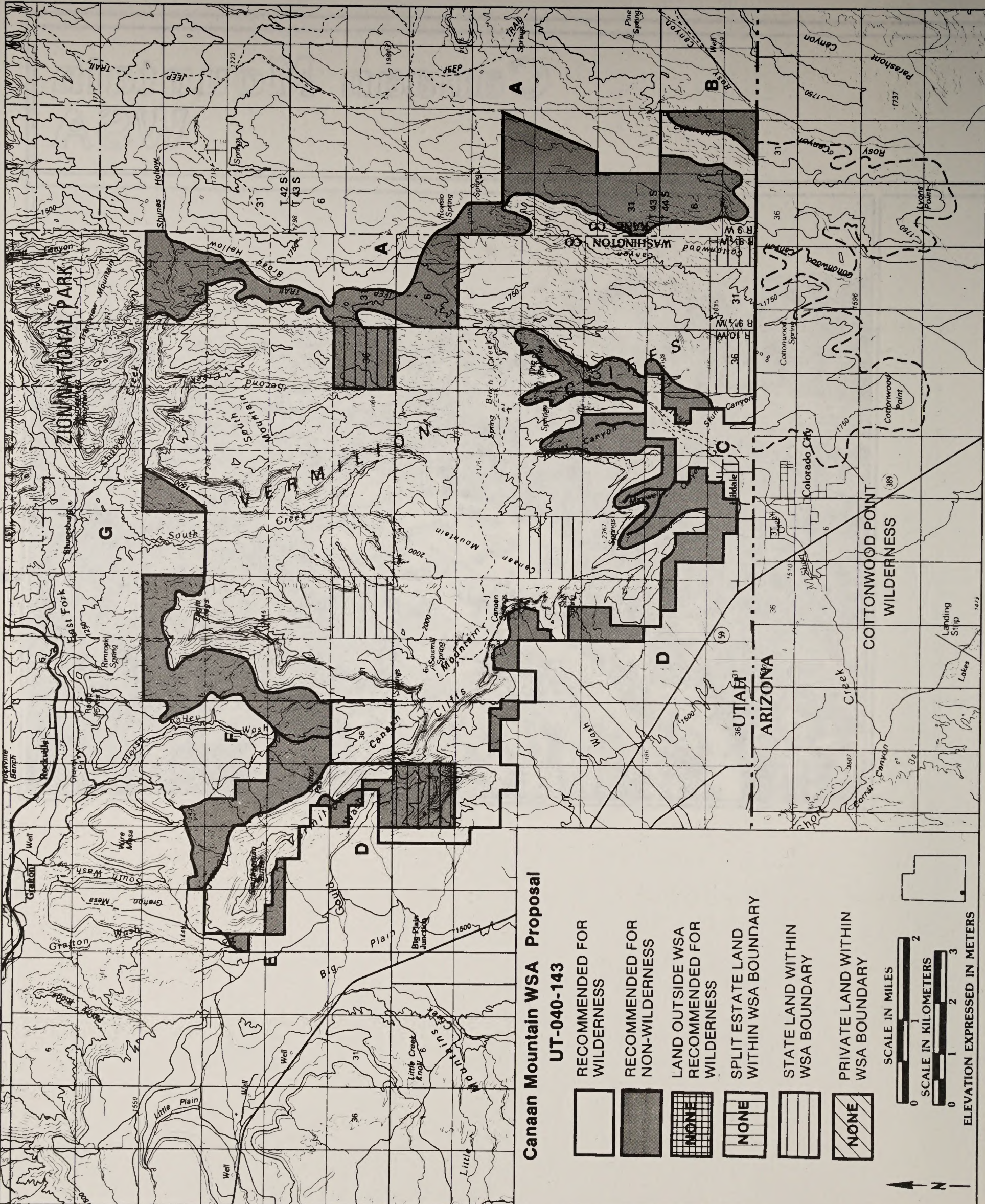
R. 10 W.

R. 11 W.

R. 5 W.

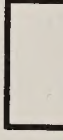



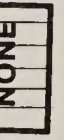
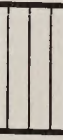
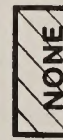
R. 6 W.

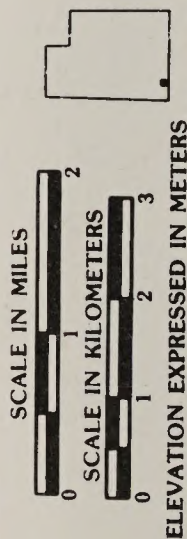
R. 7 W.



Canaan Mountain WSA Proposal

UT-040-143

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE
-  NONE
-  STATE LAND WITHIN WSA BOUNDARY
-  PRIVATE LAND WITHIN WSA BOUNDARY
-  NONE



CANAAN MOUNTAIN WILDERNESS STUDY AREA

1. THE STUDY AREA: 47,170 acres

The Canaan Mountain Wilderness Study Area (WSA) (UT-040-143) is in southeastern Washington County and southwestern Kane County, about 70 miles east of St. George, Utah (population 11,350). About 42,858 acres are in Washington County and 4,312 acres are in Kane County. The WSA is 10 miles from north to south and 10 miles from east to west (see Map).

It borders the Bureau of Land Management (BLM) Cottonwood Point Wilderness in northwestern Arizona for about 5 miles along the Arizona state line, and adjoins Zion National Park on the WSA's northeast boundary for about 4 miles. The WSA consists of 47,170 acres of public land administered by BLM and includes five sections (3,249 acres) of State land and one section (640 acres) of split-estate land (Federal surface State minerals).

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN WILDERNESS STUDY AREA	ACRES
BLM (surface and subsurface)	47,170
Split-Estate (BLM surface only) ^b	640
In-holdings (State, Private)	3,249
Total	51,059
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within WSA)	33,800
BLM (outside WSA)	0
Split-Estate (within WSA)	0
Split-Estate (outside WSA)	0
Total BLM land recommended for wilderness	34,440
In-holdings (State, private)	1,969
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	13,370
Split-Estate	640
Total BLM land not recommended for wilderness	13,370
In-holdings (State, Private)	1,280

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings and/or split-estate tracts included within the portion of the WSA recommended for designation.

^b In this report, split-estate lands are defined as only those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface are classified according to the owner of the surface.

CANAAN MOUNTAIN WILDERNESS STUDY AREA

No private land is in the WSA. Three sections (1,969 acres) of State land are in the portion recommended for wilderness (see Table 1). The split-estate land is not within the recommended wilderness portion. The study area is bordered by public (BLM), State, National Park Service (NPS), and private lands, and a road along part of the eastern boundary.

The WSA is in the Vermilion Cliffs portion of the Grand Staircase, a series of terraces and colored cliffs at the southern edge of the High Plateaus Section of the Colorado Plateau Physiographic Province. Canaan Mountain, a sheer plateau that rises 2,000 feet above surrounding land to an elevation of 7,340 feet, is the dominant feature of the WSA. Within the WSA are shallow lakes, springs, and 4 miles of perennial streams, 3 miles of which are in the portion recommended for wilderness. Most of the surface of the WSA is rock and bare soil; vegetation covers only about 20 percent of the WSA. Ponderosa pine-mountain shrub is the dominant vegetative type, occupying about 75 percent of the vegetated portion of the WSA. Pinon-juniper woodland covers approximately 19 percent, and sagebrush and riparian plants occupy the remainder of the vegetated portion of the study area.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative where 33,800 acres would be designated as wilderness and 13,370 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 33,800 acres
(recommended for wilderness)
- 13,370 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 33,800 acres as wilderness. The remaining 13,370 acres would be released for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

The objectives of recommending the partial alternative of 33,800 acres are to avoid conflicts with rangeland, wildlife and municipal water improvements, and water developments while preserving the best wilderness values. Those portions of the WSA with outstanding opportunities for solitude, primitive recreation, and special features would be included where possible within a manageable wilderness boundary. The boundary of the recommended portion is mostly at the base of the highest and most rugged terrain, and excludes two sections of State land and the split estate land (see Map). Most of the WSA is closed to off-highway vehicle (OHV) use, but much of the recommended portion is too rugged for such activity.

Much of the land not recommended for wilderness designation, such as Areas A, B, and C, lack a diversity of terrain and vegetation and the consequent outstanding opportunities for solitude and primitive recreation. Areas A and E have good potential for projects to improve wildlife habitat, woodland harvest, and nonprimitive recreation. Area B is geographically congruent with the Arizona lands released along the east boundary of the Cottonwood Point Wilderness. Area C is critical to meeting the water supply and recreation needs of the communities of Hildale and Colorado City. Area D includes the developed springs, water rights, and right-of-way associated with the natural springline below the rim of the Canaan Mountain and is critical to meeting the water supply needs of the private Canaan Ranch northwest of Hildale.

CANAAN MOUNTAIN WILDERNESS STUDY AREA

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Canaan Mountain is the largest undisturbed plateau top or tableland remaining in southwestern Utah. It possesses a quality of remoteness and naturalness not found elsewhere in the immediate region. The WSA is in a natural condition with minor exceptions. Imprints of past human activity include vehicular tracks on Canaan Mountain and in the main channel of Cottonwood Canyon, a house trailer, fences, several spring developments, reservoirs, 4 miles of ways, and remnants of a sawmill operation. These imprints combined affect 470 acres, or about 1 percent of the WSA. A baseball field with access road, wooden booths, and restrooms are on a Recreation and Public Purposes Act lease that has been cherry-stemmed from the WSA. Approximately 2 acres of disturbance resulting from feasibility and archaeological studies for the once proposed South Creek Reservoir have been rehabilitated.

B. Solitude

The WSA affords outstanding opportunities for solitude on 37,000 acres, 78 percent of the study area, due to topographic screening and, in some locations, a combination of topographic and vegetative screening. All of the portion recommended for wilderness designation easily meets the criteria for outstanding opportunities for solitude.

The summit of Canaan Mountain is a large, rough sandstone area that gives the visitor a feeling of isolation. Slotted walls of the Vermilion Cliffs and talus slopes at the base of the cliffs also provide for solitude. Several deep, narrow and thickly vegetated canyons that penetrate the plateau provide seclusion. Although the sights and sounds of human activity can be observed from some of the rims, an "island in the

sky" perception diminishes their distraction.

The remaining 10,170 acres of the WSA, all of which are in the 13,370 acre area not recommended for wilderness, lack such outstanding opportunities for solitude.

C. Primitive and Unconfined Recreation

About 28,000 acres, or 59 percent of the WSA, provide outstanding opportunities for hiking, backpacking, horseback riding, rock climbing, photography, bird watching, and sightseeing. All of the outstanding opportunities for primitive recreation are within the portion recommended for wilderness and constitute about 83 percent of the recommended area.

Areas suitable for backpacking are the most extensive, but backpacking is nevertheless limited to canyon and plateau top areas because of the rugged terrain. Cottonwood Canyon in the Cottonwood Point Wilderness is a major access to the plateau tops of the southeastern portion of the WSA. Horseback riding is more limited because some locations are passable only on foot.

Scenic quality is considered to be outstanding throughout the WSA, and is a main objective of hiking. About 36,000 acres exhibit exceptional scenic features. Among the scenic features that make the WSA outstanding are the Vermilion Cliffs and fractured, towering cliffs of Canaan Mountain; large expanses of slickrock; waterfalls; abrupt rock rims with superb views of Zion National Park and the Arizona strip south of the WSA; and sandy sagebrush parks with scattered groves of ponderosa pine and aspen.

D. Special Features

Scenery similar to that of Zion National Park and Cottonwood Point Wilderness is a significant characteristic of the WSA. An important difference, however, is that the summit of Canaan Mountain is an essentially intact expanse, unlike the smaller, separated plateau remnants in Zion National Park. There are waterfalls on perennial streams in deep, narrow canyons. The edges of Canaan Mountain

CANAAN MOUNTAIN WILDERNESS STUDY AREA

are finger-like projections that fall away abruptly; in the vicinity of The Pines, the rim of Canaan Mountain is a spectacular 1,400-foot wall.

A lumbering operation that existed on Canaan Mountain from 1915 to 1928 has significant local historical value. A windlass and pulley system on the south edge of the mountain was used to lift men, equipment, and supplies 2,000 feet to the top of Canaan Mountain. As many as 25 men were employed. Logs as large as 4 feet in diameter were harvested, and several million board feet of lumber may have been cut and removed. The operation extended only 2 to 3 miles from the sawmill because of the difficulty of access from one area on the Mountain to another and because of the primitive means of transport. The logging operation ceased in 1928 with the removal of the sawmill. Deteriorating portions of the cable and windlass and a few sawed slabs, a small building, and some machinery parts remain as evidence of the operation.

No threatened or endangered plant species are known to grow in the WSA, but four Fish and Wildlife Service (FWS) candidate threatened or endangered plant species, may grow in the WSA. These are Asplenium andrewsii, Eriqeron sionis, Heterotheca jonesii, and Sphaeromeria ruthiae. The known and projected habitat of these special status species extends beyond the WSA.

The endangered bald eagle and peregrine falcon may occasionally visit the WSA; both species have been sighted in the vicinity. Nesting sites of the sensitive prairie falcon and golden eagle have been reported in the WSA. The WSA has populations of cougar and bobcat, and the habitat could support desert bighorn sheep.

Other sensitive and FWS candidate threatened or endangered animal species, that may inhabit the WSA include Merriam's kangaroo rat, Virgin River montane vole, ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, mountain plover, western snowy plover, western yellow-billed cuckoo, Arizona Bell's vireo, white-faced ibis, and Great Basin silverspot butterfly. Refer to Appendix

4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS. PNV is the vegetation that would develop to climax in an area if not disturbed by human interference. The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is entirely juniper-pinyon woodland (47,170 acres), a type which is represented nationally in the NWPS and in BLM study areas both in and outside of Utah, but is represented in the NWPS in Utah in only one wilderness (Box-Death Hollow in the Dixie National Forest). It also is the PNV type for the contiguous Cottonwood Point Wilderness in Arizona.

This information is summarized in Table 2, from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of this population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The Canaan Mountain WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada. Twelve designated wilderness areas are within 100 miles of the WSA.

CANAAN MOUNTAIN WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,095,935
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,659,028

Source: BLM File Data.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREA	ACRES
Las Vegas, Nevada	38	3,131,130	55	2,176,498

Source: BLM File Data.

In a clockwise direction beginning to the north are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 26,000-acre Box-Death Hollow Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 37,300-acre Grand Wash Cliffs Wilderness (BLM), and the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

All of the WSA can be effectively managed to preserve values now present in the area. In the area recommended for wilderness up to 2 acres would be disturbed by construction of a livestock trail and three spring developments, but

these developments would be designed and installed consistent with standards for wilderness protection. No additional rangeland, wildlife habitat, watershed projects, or other developments are planned in the area that would be designated. There are 71 existing mining claims in the portion of the WSA recommended as wilderness, but exploration or development are not projected in the foreseeable future. There also are 920 acres of post-FLPMA oil and gas leases. These leases are subject to the non-impairment stipulation and would not be allowed to impair wilderness quality.

Continuation of livestock grazing and maintenance of rangeland facilities as presently practiced would not significantly affect wilderness management. There are no other valid rights inside the recommended area that would threaten wilderness characteristics.

There are 3,249 acres in six sections of State land scattered throughout the WSA. Provision of reasonable access to these lands could reduce wilderness values and complicate wilderness management.

CANAAN MOUNTAIN WILDERNESS STUDY AREA

However, the need to access these lands for development is not expected in the foreseeable future.

The portion of the WSA not recommended for wilderness also could be managed for wilderness. There are mining claims and mineral leases in this portion of the WSA, but development is not expected in the foreseeable future. There are four rights-of-way for water pipelines and a canal, but maintenance would not reduce the wilderness quality of the area as a whole. Use of this part of the WSA would be administratively more difficult for BLM to manage than the recommended area because this part of the WSA is around the fringes of the unit and is more accessible to the public, including the adjacent communities.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report on 32,800 acres in the Canaan Mountain WSA (USGS Bulletin 1746-A, R.E. Van Loenen, et al., 1988). The area that was investigated corresponds with the portion of the WSA that is recommended for wilderness. The area was evaluated in 1985 and 1986.

The report indicates that no identified mineral resources occur in the area that was studied. The mineral and energy potential for oil and gas is moderate, and is low for undiscovered copper, gold, lead, silver, zinc, manganese, uranium, coal, and geothermal energy. Sand, gravel, and clay in the Canaan Mountain WSA have no unique qualities that make them more valuable than the large quantities of similar materials in surrounding areas.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 91 inputs specifically addressing this WSA were received from 100 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 82 commenters supported wilderness designation for part or all of the WSA, while 12 commenters were opposed. Six commenters addressed the relative merits of the EIS, but took no formal position on wilderness.

Those favoring wilderness commented on special features of the WSA. The majority of those commenting in favor of wilderness were from outside the state, but there were nearly as many from urban Utah. Of particular concern was the need to protect wilderness values and to complement potential wilderness in adjacent Zion National Park.

Those opposing wilderness were concerned that wilderness would preclude water use and control and felt that the WSA lacks outstanding opportunities for primitive recreation and solitude. Most of the commenters were from rural Utah, but two were from outside the state.

Two Federal agencies, the NPS and the USBM commented on the Draft EIS. The NPS stated that either the all wilderness or partial wilderness alternatives would be compatible with Zion National Park management. The NPS noted that the all wilderness alternative would enhance and protect wilderness opportunities in the Transview Mountain area in the National Park by limiting possible ORV access.

CANAAN MOUNTAIN WILDERNESS STUDY AREA

The USBM noted that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1989. These findings have been incorporated into the Final EIS and study report.

opportunities for solitude or primitive recreation.

No comment letters were received on the Final EIS.

There are five sections (3,249 acres) of State land and one section (640 acres) of split-estate land with Federal surface and State minerals in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State noted that the high quality wilderness values are all retained in the partial wilderness alternative. Wilderness management of the Canaan Mountain WSA would complement and enhance wilderness values in the adjacent Zion National Park and Cottonwood Point Wilderness. The State believes that the alternative eliminates most conflicts and that negative impacts are low. The State cites potential conflicts with an uranium resource. The State noted that oil company reports indicate moderate potential for economic accumulations of hydrocarbon reservoirs and that the Town of Hildale receives some of its public water supply from the WSA.

The Canaan Mountain WSA is in Washington and Kane Counties. The Washington County Master Plan identifies the WSA as an open space zone. The Kane County Master Plan supports the total concept of multiple use of lands and rejects wilderness as an exclusionary recreational form that cannot be used by the average recreation visitor. Both County Commissions have indicated that they do not support wilderness designation for this WSA and have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS, the Counties stated that this WSA includes important sources of culinary water and that wilderness designation would impede water developments. In their opinion, significant portions of the WSA do not provide outstanding op-

CANAAN MOUNTAIN WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives	
Issue Topics	Recommendation Partial Wilderness (33,800 Acres)
Impacts on Wilderness Values	Wilderness designation would preserve wilderness values over all in the designated area which is about 72 percent of the WSA. In the nondesignated area, the same loss of wilderness values would occur as for the No Action/No Wilderness Alternative. Wilderness values would be directly lost on 309 acres and indirectly reduced in quality on up to 2,359 acres due to development of rangeland projects. Continued vehicular use of 4 miles of way would detract from opportunities for solitude and primitive recreation. Designation would be compatible with management of adjacent NPS and wilderness lands. Over the long term future, additional distribution from development of a utility corridor in Rosy Canyon would occur and an unknown amount of wilderness values would be lost.
Impacts on Vegetation	Effects would be the same as for the No Action/No Wilderness Alternative because the proposed projects and existing access routes would be in the nondesignated area.
Impacts on Water Resources	Effects would be the same as for the No Action/No Wilderness Alternative because the proposed projects and existing access routes would be in the nondesignated area.
Impacts on Livestock Management	Livestock management would not be significantly affected because existing ways would remain open for use and the proposed vegetation treatment would be allowed. However, construction of two of the four proposed reservoirs would not be allowed.
	No Action/No Wilderness
	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation and scenic values would be directly lost on 309 acres of the WSA and indirectly reduced in quality on up to an additional 2,360 acres of the WSA due to rangeland developments. Continued vehicular use of 4 miles of ways would detract from opportunities for solitude and primitive recreation. Over the long term future, additional distribution from development of a utility corridor in Rosy Canyon would occur and an unknown amount of wilderness values would be lost. The No Action/No Wilderness Alternative would not complement management policies for the adjacent Zion National Park and Cottonwood Point Wilderness.
	All Wilderness (47,170 Acres)
	Wilderness values would be preserved overall in the WSA. In the foreseeable future, naturalness, opportunities for solitude and primitive recreation, and scenic values would be slightly reduced in quality on 6 acres because of allowable rangeland projects. Development of the utility corridor would not occur within wilderness. Designation would be consistent with management of the adjacent Zion National Park and Cottonwood Point Wilderness.
	There would be no effects on vegetation because surface disturbance would be reduced. Additional protection would be provided to any special status species that may occur.
	Wilderness designation would not alter present or future water quality, but would preclude development of four proposed livestock reservoirs.
	Wilderness designation would inconvenience livestock operators in the area by restricting vehicular access on 4 miles of ways. The loss of the vegetation treatments and proposed reservoirs would preclude potential AUM increases and opportunities to improve livestock distribution.
	No Action/No Wilderness
	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation and scenic values would be directly lost on 309 acres of the WSA and indirectly reduced in quality on up to an additional 2,360 acres of the WSA due to rangeland developments. Continued vehicular use of 4 miles of ways would detract from opportunities for solitude and primitive recreation. Over the long term future, additional distribution from development of a utility corridor in Rosy Canyon would occur and an unknown amount of wilderness values would be lost. The No Action/No Wilderness Alternative would not complement management policies for the adjacent Zion National Park and Cottonwood Point Wilderness.
	About 1 percent (309 acres) of pinyon-juniper woodland and sagebrush in the WSA would be disturbed. Threatened, endangered, or other special status plant species would not be significantly affected because sensitive areas would be avoided.
	Present or future water quality and uses would not be affected because projected disturbance would be temporary and proposed water projects could be constructed.
	Current livestock grazing would not be affected because management practices and access would remain as at present and all of the proposed livestock projects would be constructed.

CANAAN MOUNTAIN WILDERNESS STUDY AREA

Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 42 S., R. 10 W., Sec. 32	640.00		State	No	Exchange		\$2,000
T. 43 S., R. 9.5 W., Sec. 32	221.70		State	No	Exchange		\$ 700
T. 43 S., R. 10 W., Sec. 16	640.00		State	No	Exchange		\$2,000
T. 43 S., R. 10 W., Sec. 36	466.80		State	No	Exchange		\$1,600

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

Moquith
Mountain WSA

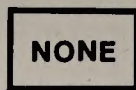


MOQUITH MOUNTAIN WSA

R. 8 W.

R. 7 W.

Moquith Mountain WSA Proposal UT-040-217



RECOMMENDED FOR WILDERNESS



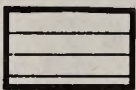
RECOMMENDED FOR NON-WILDERNESS



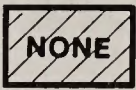
LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS



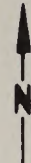
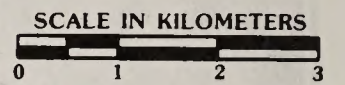
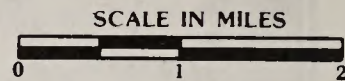
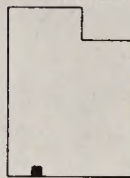
SPLIT ESTATE LAND WITHIN WSA BOUNDARY



STATE LAND WITHIN WSA BOUNDARY



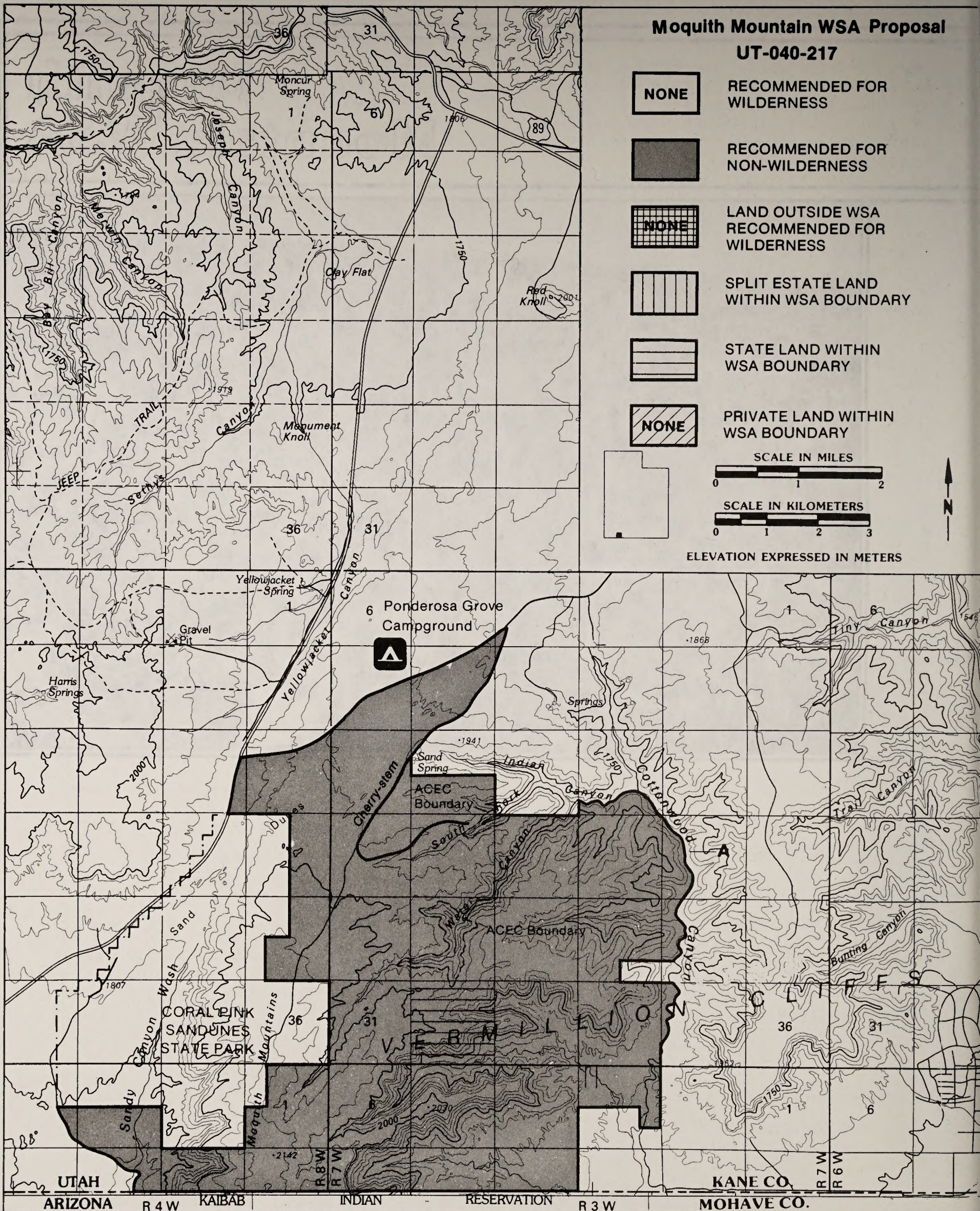
PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS

T. 42 S.

T. 43 S.



UTAH
ARIZONA

R. 4 W.

KAIBAB

R. 8 W.

R. 7 W.

INDIAN

RESERVATION

R. 3 W.

KANE CO.
MOHAVE CO.

R. 7 W.

R. 6 W.

MOQUITH MOUNTAIN WILDERNESS STUDY AREA

1. THE STUDY AREA: 14,830 acres

The Moquith Mountain Wilderness Study Area (WSA) (UT-040-217) is in southwestern Kane County just north of the Arizona state line and about 4 miles west of Kanab, Utah (population 2,148). The WSA includes 14,830 acres of public land administered by the Bureau of Land Management (BLM). Within the boundaries of the WSA are, 680 acres of State land, including 40 acres of private land with State-owned mineral rights (see Table 1). No split-estate lands (Federal surface ownership with non-Federal mineral ownership) are in the study area. The Coral Pink Sand Dunes State Park borders most of the WSA on the west, the Kaibab Indian Reservation in Arizona borders the WSA for 5.25 miles on the south, and roads and non-Federal lands border the unit on the north and east (see Map).

Five distinct landforms comprise the WSA. In the central part are the Vermilion Cliffs, a "step" in the Grand Staircase, the southern end of the High Plateaus of Utah Section of the Colorado Plateau Physiographic Province. The north side of the Vermilion Cliffs terrace includes a portion of the Coral Pink Sand Dunes and an escarpment above the dunes. Several canyons cut into the WSA. The upper part of the study area is a rocky tableland covered with pinyon-juniper woodland. Elevations range from 5,000 feet in the southeast, at the foot of the cliffs, to 7,000 feet on Moquith Mountain in the southwest corner of the WSA.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN WILDERNESS STUDY AREA	ACRES
BLM (surface and subsurface)	14,830
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	680
Total	15,510
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within WSA)	0
BLM (outside WSA)	0
Split-Estate (within WSA)	0
Split-Estate (outside WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	14,830
Split-Estate	0
Total BLM land not recommended for wilderness	14,830
In-holdings (State, Private)	680

Source: BLM File Data

MOQUITH MOUNTAIN WILDERNESS STUDY AREA

BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative which is the recommendation in this report, and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

0 acres

(recommended for wilderness)

14,830 acres

(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

Essentially all of the WSA is natural and includes special features. More than half of the area has outstanding opportunities for solitude, and almost half has outstanding opportunities for primitive and unconfined recreation. However, nonprimitive recreational uses and users frequently overflow into the WSA from the adjacent Coral Pink Sand Dunes State Park. The need to accommodate what has become established use associated with developed facilities and vehicle recreation, including off-highway vehicle (OHV) use, outweighs the wilderness values present in the WSA. Current vehicular recreational use is estimated at 5,700 visitor days annually, compared with about 300 visitor days attributed to nonvehicular recreation. Sights and sounds of vehicle activities in the adjacent State Park detract from solitude in portions of the WSA.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substan-

tially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Approximately 14,760 acres (99.5 percent) of the WSA are in a natural condition. Although the visible evidence of man is found on only a very small total acreage of the WSA, individual imprints can be encountered throughout much of this relatively small WSA. The effect is to reduce the overall quality of the naturalness attribute. In certain of the more remote and scenic canyon systems such as Water Canyon, the naturalness characteristic is of very high quality. There are substantially noticeable imprints on a 70-acre flat in the northwest part of the WSA adjacent to Coral Pink Sand Dunes State Park. The imprints consist of trails and disturbance caused by camping associated with recreation in the State Park and have probably been occurring since the 1960s. A water well with associated reservoir, access road, and trail have been in the same area since 1976. Construction of a culinary water line, including cutting down several trees and leaving the stumps, disturbed a small portion of the WSA. Altogether these disturbances comprise about 70 acres (0.5 percent of the WSA).

B. Solitude

Approximately 8,800 acres, 59 percent of the WSA, contain outstanding opportunities for solitude. Areas that provide solitude include the 1,500 acres of Coral Pink Sand Dunes within the WSA; short steep canyons in the cliffs on the western side of Moquith Mountain above the Coral Pink Sand Dunes; and the summit of Moquith Mountain where isolation, sandstone outcroppings, and ponderosa pines provide screening. The areas are dispersed throughout the WSA, but in general, the southern portion and parts of the eastern segment of the WSA provide solitude.

The remaining 6,030 acres of the study area do not contain outstanding opportunities for solitude. Vehicles can be seen and heard in the northern parts of the WSA, and sights and sounds from the sand dunes in the State Park detract from solitude in the northwest.

MOQUITH MOUNTAIN WILDERNESS STUDY AREA

C. Primitive and Unconfined Recreation

Opportunities are outstanding for hiking, backpacking, horseback riding, hunting, photography, and sightseeing on 7,300 acres, or 49 percent of the WSA. Some activities, such as horseback riding and visiting archaeological features, are limited by terrain or by location. Opportunities for other activities, such as photography and hiking, are available virtually throughout the study area, hampered only by sheer cliffs and the possible difficulty of traversing the sand dunes. Backpacking opportunities are more limited because of the relatively small size of the WSA.

Criteria for outstanding opportunities for primitive recreation are not met on 7,530 acres or about 51 percent of the WSA.

D. Special Features

About 7,300 acres in the WSA are of outstanding scenic quality. In addition, there are perennial streams, hanging gardens, isolated stands of Ponderosa pine and aspen, large alcoves, shifting sand dunes, and prehistoric sites, including the South Fork Indian Canyon Pictograph. As well as providing opportunities for photography, the diverse features of the WSA are relatively accessible, have scientific value, and the potential for environmental education and natural history interpretation.

A threatened plant species, Asclepias welshii, that grows in active sand dune areas in association with sagebrush, juniper, and Ponderosa pine, is found in the northwest part of the WSA. Astragalus ampullaris, a U.S. Fish and Wildlife Service (FWS) Category 2 candidate species, which is a species that may become listed as threatened or endangered pending more information, may also be found in the WSA, as it is known to occur in the vicinity.

The endangered bald eagle and peregrine falcon may occasionally visit the WSA, but neither species is believed to nest in the study area. Other FWS candidate

species which may inhabit the WSA include ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, western snowy plover, western yellow-billed cuckoo, white-faced ibis, Coral Pink Sand Dunes tiger beetle, and Great Basin silverspot butterfly. The Utah Division of Wildlife Resources lists roadrunners, Lewis woodpeckers, and fox sparrows as sensitive species. All of these species inhabit the WSA.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of ecosystems not presently represented in Utah or in the NWPS. Potential natural vegetation (PNV) is vegetation that would develop to a climax state if an area remains undisturbed by human interference. The WSA is in the Colorado Plateau Province/Ecoregion. The PNV type in the WSA is juniper-pinyon woodland which is represented nationally in the NWPS and is well represented in BLM study areas both in and outside of Utah. This information is summarized in Table 2, from data compiled in February 1989 and from BLM files.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Provo-Orem, Utah, and Las Vegas, Nevada. Table 3 shows the number and acreage of designated wilderness areas and of other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

Designation of the Moquith Mountain WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

MOQUITH MOUNTAIN WILDERNESS STUDY AREA

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	10	1,393,647	84	2,128,275
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,691,368

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREA	ACRES
Las Vegas, Nevada	38	3,132,130	54	2,129,328
Provo-Orem	11	721,793	90	2,772,038

Source: BLM File Data.

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 26,000-acre Box-Death Hollow Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 37,300-acre Grand Wash Cliffs Wilderness (BLM), and the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Portions of the WSA such as Water Canyon could be effectively managed as wilderness. In other areas such as the Coral Pink Sand Dunes, effective management would be difficult. It would be necessary to prevent the increasing recreational demand in the adjacent Coral Pink Sand Dunes State Park from affecting about 3,200 acres in the northwestern part of the study area. The terrain changes little and the boundary of the WSA is indistinct to sand dune visitors in this area.

Livestock grazing and maintenance of existing facilities would continue and would not significantly reduce wilderness values. Maintenance of an existing water line to Fredonia, Arizona also would not unduly affect wilderness values or management.

There are no mineral leases or mining claims in the WSA to interfere with wilderness management. There are 680 acres of in-held lands, but the need for access is not expected in the foreseeable future.

MOQUITH MOUNTAIN WILDERNESS STUDY AREA

Energy and Mineral Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area. According to BLM geologists, the mineral and energy potential for oil and gas and uranium is moderate, but is low for all metals, geothermal sources, and undiscovered coal. Deposits of stream gravel and other loose rocks are present within the WSA, but these deposits are not economically significant because ample supplies of similar materials exist elsewhere.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 42 inputs specifically addressing this WSA were received from 55 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 41 commenters supported wilderness designation for part or all of the WSA, while 11 commenters were opposed. Three commenters addressed the

relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features in the WSA. Those commenting in favor of wilderness were from outside the state. Of particular concern was the need to protect wilderness values from off road vehicle use.

Those opposing wilderness were concerned that wilderness would harm local economy. All but two commenters, who were from outside Utah, were from rural Utah.

One Federal agency, the Environmental Protection Agency (EPA), commented on the Draft EIS. The EPA took no formal position on wilderness designation but suggested that additional consideration be given to off-road vehicle controls in the Moquith Mountain WSA as deemed appropriate by BLM.

No comment letters were received on the Final EIS.

There is one section (680 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State considers the WSA to have low-quality wilderness values and moderately high conflicts. The conflicts are associated with water and nonwilderness recreational developments planned for areas within and adjacent to the WSA. The State noted that Fredonia, Arizona uses water from the WSA for culinary purposes.

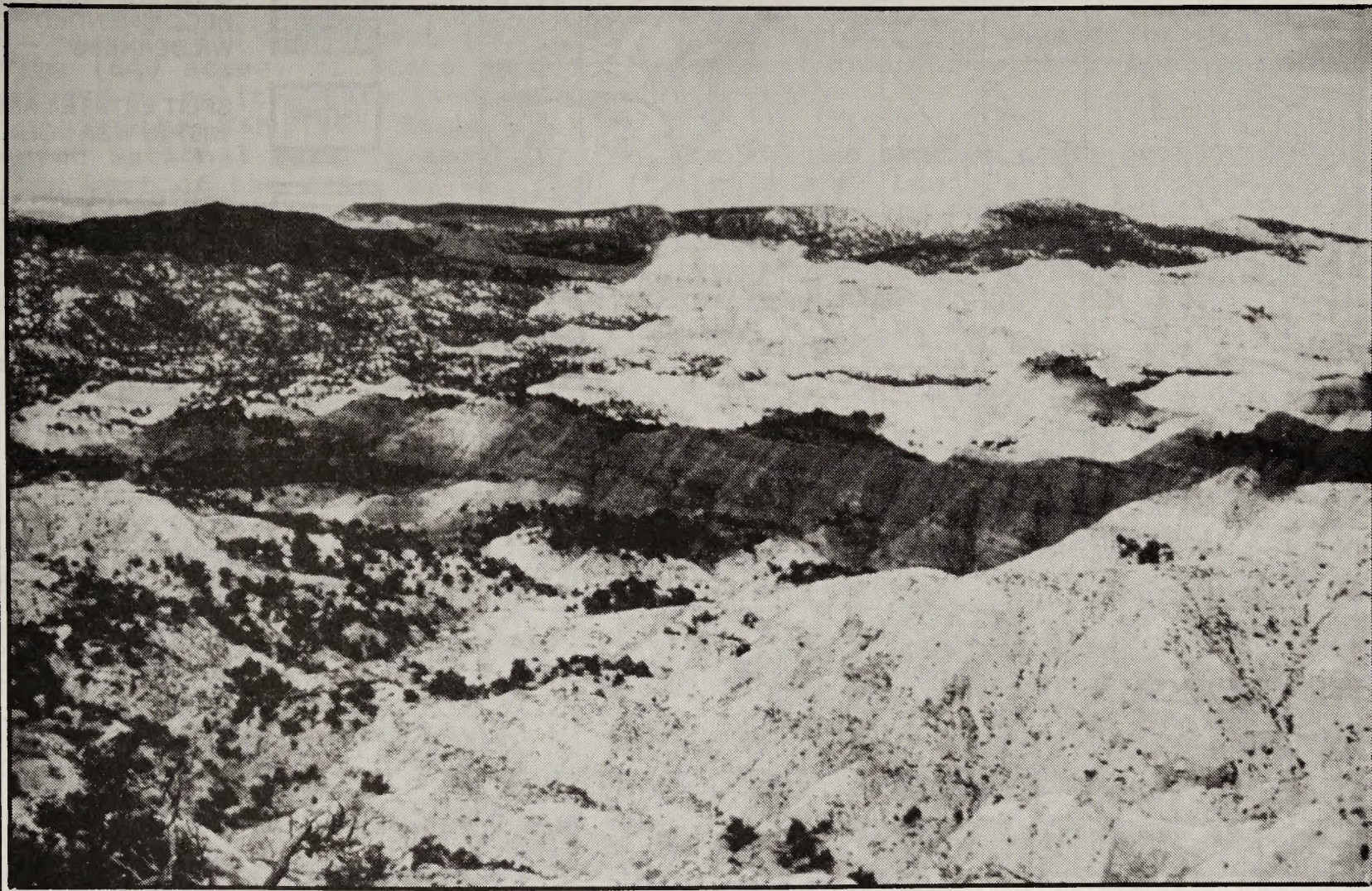
The Kane County Commission is opposed to wilderness designation of the Moquith Mountain WSA. In commenting on the Draft EIS the County Commission expressed support for BLM's No Action/No Wilderness proposal. The Kane County Master Plan rejects wilderness as an exclusionary recreational form that cannot be used by the average recreational visitor.

MOQUITH MOUNTAIN WSA

Table 4
Comparative Summary of Impacts by Alternative

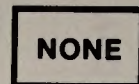

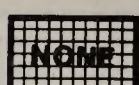
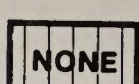
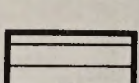
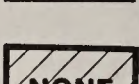
Alternatives	
Issue Topics	Recommendation No Action/No Wilderness All Wilderness (14,830 Acres)
Impacts on Wilderness Values	<p>Wilderness values would not be preserved by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly or indirectly lost on up to 4,450 acres of the WSA due to campground and rangeland developments and ORV activity. Class A scenery would be reduced in quality in disturbed areas, and continued monitoring of threatened Welsh's milkweed would be necessary.</p> <p>Wilderness values would be preserved. In the foreseeable future, wilderness values would be slightly reduced in quality on 3 acres by development of rangeland projects.</p>
Impacts on Vegetation	<p>No vegetation types would be significantly altered because less than 1 percent (104 acres) of the pinyon-juniper woodland in the WSA would be altered. Specific management of the threatened Welsh's milkweed would ensure the continued existence of the species.</p> <p>Wilderness designation would aid in the protection of the Welsh's milkweed on the sand dunes. Vegetation types in the WSA would not be altered.</p>
Impacts on Water Resources	<p>No significant impacts would occur to water quality because disturbance would not be near surface waters and mitigation would be required. Water uses and development could occur without wilderness restrictions.</p> <p>Watershed values and recharge areas would be protected. Opportunities for expansion of existing facilities for the community of Fredonia's water supply would likely be foregone.</p>
Impacts on Livestock Management	<p>Livestock management would not be significantly affected because new facilities could be installed to aid in livestock distribution and use of vehicles in livestock management would continue.</p> <p>Restrictions on 11 miles of way would inconvenience seven permittees and increase management costs and time.</p>
Impacts on Recreation	<p>Opportunities for primitive recreation would be adversely affected in parts of the WSA by substantial increase in ORV recreational use and by rangeland developments. Development of the campsite next to the State park would help accommodate the increased ORV use.</p> <p>Primitive recreation would be enhanced because ORV use and intensive recreation would be restricted. Overall visitation in the WSA would decline. Development of the planned overflow campsite would not be allowed in the wilderness. An established ORV use area would no longer be available for such use. Closure to vehicular use would be administratively difficult.</p>

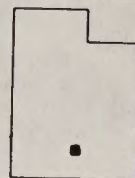
The Blues WSA



THE BLUES WSA

The Blues WSA Proposal UT-040-268

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  PRIVATE LAND WITHIN WSA BOUNDARY



SCALE IN MILES
0 1 2

SCALE IN KILOMETERS
0 1 2 3

ELEVATION EXPRESSED IN METERS



T. 35 S.

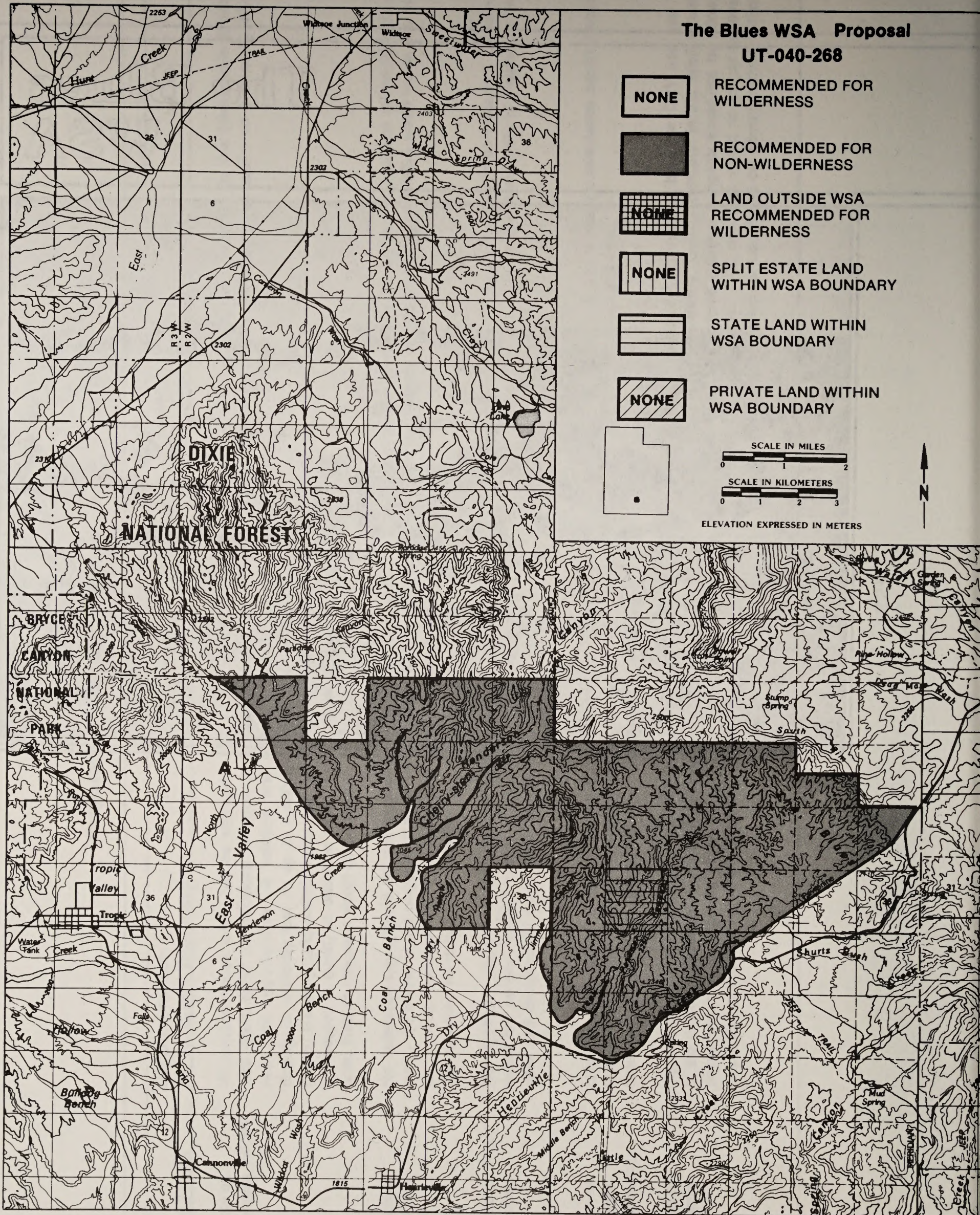
T. 36 S.

T. 37 S.

R. 2 W.

R. 1 W.

October 1991



THE BLUES WILDERNESS STUDY AREA

1. THE STUDY AREA: 19,030 acres

The Blues Wilderness Study Area (WSA) (UT-040-268) is in southern Garfield County, about 5 miles northeast of Henrieville, Utah (population 167). The WSA is 6 miles from north to south and 11 miles wide, from east to west, along the northern boundary (see Map). It includes 19,030 acres of public land administered by the Bureau of Land Management (BLM). One section (640 acres) of State land, but no private or split-estate lands are inheld within the WSA (see Table 1). Bryce Canyon National Park is about 10 to 15 miles west of the WSA. The WSA is bordered by the Dixie National Forest on the north and east for about 10.5 miles, by State Highway 12 and a powerline on the southeast for about 10 miles, and by roads, ways, and non-Federal land on the south and west (see Map).

Mud Spring Canyon WSA (UT-040-077) is adjacent to the southeast, separated from The Blues WSA by State Highway 12.

Elevation ranges from 6,400 feet at the western edge of the WSA to 8,200 feet near the National Forest boundary, on the northwest. Cliffs, hills, and the blue-gray shale badlands for which the WSA is named, characterize the study area. The dominant vegetation is pinyon-juniper woodland with a sparse understory.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	19,030
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	640
Total	19,030
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	19,030
Split-Estate	0
Total BLM land not recommended for wilderness	19,030
In-holdings (State, Private)	640

Source: BLM File Data

THE BLUES WILDERNESS STUDY AREA

Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative, which is the recommendation in this report, and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

0 acres
(recommended for wilderness)
19,030 acres
(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

BLM believes that the long-term potential for coal development outweighs the wilderness values of the WSA. The WSA contains an estimated 270 million tons of coal, about half of which could be recovered by underground mining. Some potential also exists for the discovery of small amounts of oil and gas.

Although exploration and development of coal and possibly of oil and gas is not expected in the short term, in view of the long term potential and the relatively low quality of wilderness values, The Blues should not be designated as wilderness. Wilderness designation would curtail mineral development.

Under existing laws and regulations, all special status plant and animal species and cultural resources would be protected.

The Blues WSA does not include high scenic qualities and only 8 and 16 percent of the study area include areas with outstanding opportunities for solitude and primitive recreation, respectively.

Current nonmotorized recreational use is estimated to be only 10 visitor days annually.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The appearance of naturalness in the WSA is influenced by the proximity of the study area to the Table Cliffs plateau and amphitheater on the adjacent Dixie National Forest. Much of the badlands area is immediately below the pink escarpment of the Table Cliffs. West of Henderson Canyon, the cliffs and buttes are an extension of formations on the National Forest. The perception of naturalness gained by sightseers and hiking visitors to the WSA is that of WSA natural scenes serving as foreground to and in combination with a larger natural area in the Table Cliffs region. The criteria for naturalness are substantially met on more than 99 percent of the WSA. The only imprints of human activity are about 5 miles of way and 4 miles of fence, affecting less than 1 percent of the study area.

B. Solitude

A total of about 1,600 acres (8 percent of the WSA) include scattered areas that provide outstanding opportunities for solitude. These areas are all small and are in the western portion of the WSA, in the northern part near the boundary with Dixie National Forest, a portion of the east side of Henderson Canyon, the central portion, and an area in the Blues badlands.

The remaining 17,430 acres (92 percent) of the WSA do not provide opportunities for visitors to avoid the sights, sounds, and evidence of others. Sights and sounds of human activities are not generally present in or from most places in the WSA, however. An exception is on the elevated south rim of the Blues amphitheater, where sights and sounds of trucks on the steep grades of Highway 12 and activities at a nearby oil docking facility could detract from the feeling of solitude.

THE BLUES WILDERNESS STUDY AREA

C. Primitive and Unconfined Recreation

Approximately 3,000 acres, or 16 percent, of the WSA include outstanding opportunities for primitive recreation. Diverse activities for which there are exceptional opportunities are hiking, backpacking, rock climbing, hunting, and sightseeing.

Opportunities for hiking and hunting exist throughout the WSA, and there are few if any parts of the WSA where these activities could not be pursued. Rock climbing, on the other hand, is limited to three sites on sheer sandstone cliffs, and the most interesting botanical sightseeing is limited to plant associations in The Blues badlands.

Backpacking and geological sightseeing opportunities are in the same locations. Opportunities for backpacking exist because the complete range of stratigraphy and variety of landforms in the WSA cannot be seen in a day's hike, for example. Some backpacking and geological sightseeing involve traversing parts of Dixie National Forest and the inheld State section. Excellent opportunities for exploration are also found in certain remote and dissected parts of the WSA.

The remaining 16,030 acres (84 percent of the WSA) do not exhibit outstanding opportunities for recreation.

D. Special Features

Peregrine falcons, an endangered species, may visit or inhabit the WSA. U.S. Fish and Wildlife Service (FWS) candidate threatened or endangered animal species that may be found in the WSA include the ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, white-faced ibis, and Great Basin Silverspot butterfly. The golden eagle, a BLM sensitive species, may also occur in the study area.

One plant species which is eligible to be listed and that may grow in the WSA is Lepidium montanum var. stellae.

FWS candidate plant species which may occur in the WSA are Lepidium montanum var. neeseae, Heterotheca jonesii, Coryphantha missouriensis var marstonii,

and Psoralea pariensis. Xylorhiza confertifolia, considered by some to be a sensitive species, may also grow in the WSA. The known and potential habitats for all these special status species extends beyond the WSA boundaries.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS. PNV is the vegetation that would develop in an area if not disturbed by human activities. The WSA is in the Colorado Plateau Province/Ecoregion, and the PNV would be juniper-pinyon woodland. Because of conditions in the WSA, however, juniper-pinyon woodland probably would never cover more than 40 percent (7,600 acres) of the surface.

Juniper-pinyon woodland PNV is represented nationally in the NWPS, is well represented in BLM study areas both in and outside of Utah, and is represented in one wilderness, the Box-Death Hollow Wilderness in the Dixie National Forest in Utah.

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Provo-Orem, Utah, standard metropolitan statistical area. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of this population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The Blues WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January, 1987, the NWPS included 64 wilderness areas comprising 2,834,115 acres in Utah and Arizona.

THE BLUES WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,124,168
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,687,168

Source: BLM File Data.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Provo-Orem, Utah	11	721,793	90	2,767,838

Source: BLM File Data.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the northeast, are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 37,300-acre Grand Wash Cliffs Wilderness (BLM), the 7,000-acre Ashdown Gorge Wilderness, and the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The Blues WSA could be effectively managed as wilderness. There are 70 acres of coal lease and 480 acres of oil and gas leases in the WSA, but it is expect-

ed that these leases would expire and would not be renewed. There are no mining claims in the WSA and development of locatable minerals is not projected in the foreseeable future.

Livestock grazing and maintenance of 4 miles of fence would continue, and would not significantly affect the wilderness values of the WSA. There is one section (640 acres) of State land inheld in the WSA. Because of the known coal resources in the WSA, it is projected that about 1 mile of new access road to the State land would be required through the area following wilderness designation. Additionally, any coal mining operations on the State lands would reduce wilderness values on the adjacent wilderness.

Energy and Mineral Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area. According to BLM geologists, the potential for coal resources is high. The WSA

THE BLUES WILDERNESS STUDY AREA

is in the Kaiparowits Known Recoverable Coal Resource Area (KRCRA). Up to 270 million tons of coal, about half of which is recoverable by underground mining, are within the WSA at depths of 1,000 to 3,000 feet beneath the surface. The coal is of moderate quality, with an average heat value of 11,683 Btu's and low sulfur content.

Favorability that oil and gas resources are within the WSA is moderate for medium size deposits in the north-central part of the study area and for small deposits in the remainder of the WSA, but the degree of certainty that these exist is low.

The potential for recoverable deposits of metallic minerals is low. Small deposits of stream gravel and other loose rock in the WSA are usable in construction but are not economically significant because of ample supplies of similar materials elsewhere in the vicinity.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

With BLM's recommendation, the WSA would not be designated as wilderness but would be released for other uses. The recommended action would not result in a loss of local employment or income. Opportunity to explore and develop mineral and energy resources would remain as at present. Oil and gas leasing would be open on 18,550 acres which are currently not leased, and exploration could occur. The effects on local economy would be relatively minor and temporary. Total employment would not exceed 40 and would last about 2 years.

Coal leasing would be open on 18,960 acres. No coal mining is anticipated in the short term, but exploration and mining could occur in the next 30 years. If coal mining occurs, the effects on the local economy would be significant, but it cannot be predicted whether one or more mines would be within the WSA boundaries.

Livestock-related economic conditions would not change, because there would be no effect on livestock grazing management. Recreation-related local expenditures directly attributable to the use of the WSA would not be significant to the local economy.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 42 inputs specifically addressing this WSA were received from 53 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 30 commenters supported wilderness designation for part or all of the WSA, while 20 commenters were opposed. Three commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the special features in the WSA and opportunities for primitive recreation. The majority of those commenting were from outside of Utah.

Those opposing wilderness were concerned that enough wilderness has already been designated and more wilderness would harm State and local economies, and that mineral exploration and development would be precluded. Most of those commenting in favor of wilderness were from outside the state, but a significant number of those opposed to wilderness designation were from rural Utah.

Three Federal agencies, the FS, USBM, and the Environmental Protection Agency (EPA) commented on the Draft EIS. The FS

THE BLUES WILDERNESS STUDY AREA

stated that the Dixie National Forest concurs with the recommendation to not propose wilderness in the WSA. The USBM did not take a position regarding designation or nondesignation but commented that BLM had understated the petroleum potential of the WSA. The EPA took no formal position on wilderness designation but suggested that an estimate be developed to evaluate the long-term coal development feasibility of the WSA as the potential for coal development may not be a real factor in recommending the area as unsuitable.

No comment letters were received on the Final EIS.

There is one section (640 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State believes that the relatively low-quality wilderness values found in the WSA are not significant enough to override the relatively high degree of conflicts. The conflicts do not seem to be resolvable by boundary adjustment. The State suggests that a scenic area or Area of Critical Environmental Concern (ACEC) designation would help preserve the scenic values of the badlands.

The Garfield County Commission is opposed to wilderness designation of The Blues WSA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. Garfield County previously proposed to the Utah Congressional Delegation that 111,053 acres of BLM lands in three WSAs and 31,600 acres in one FS unit in the county be recommended as wilderness. The Garfield County Master Plan recommends that the remaining lands in the county, including the Blues WSA, be retained for multiple uses.

THE BLUES WSA

Table 4
Comparative Summary of Impacts by Alternative

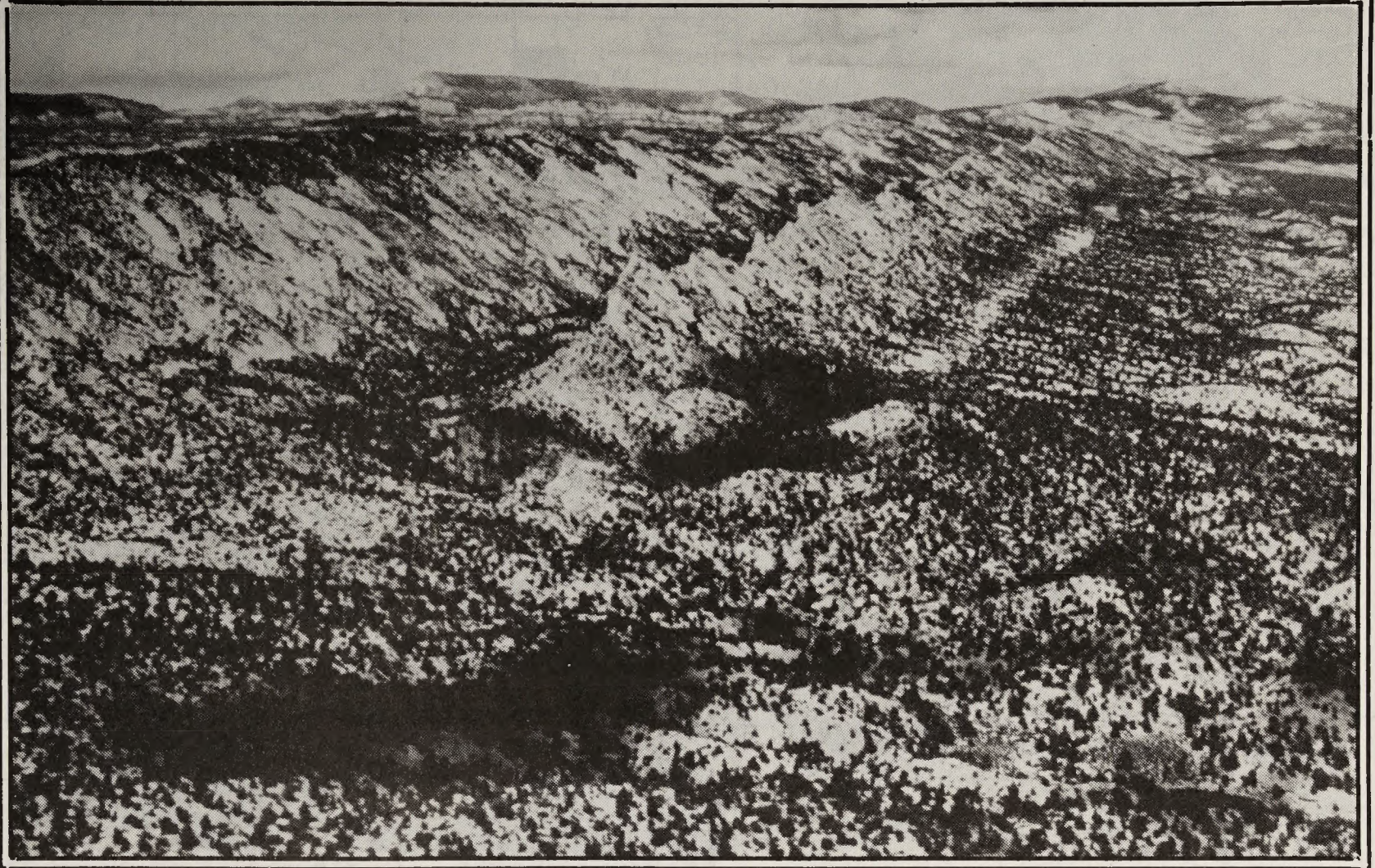
Issue Topic	Recommendation No Action/No Wilderness	Alternatives All Wilderness (19,030 Acres)
Impacts on Wilderness Values	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 681 acres due to rangeland and leaseable mineral developments. During the period of activity, opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 2,855 acres. Special features would not be significantly affected. Continued and increased vehicular use of the existing way and future roads would detract from opportunities for solitude and primitive recreation.	Wilderness values would be preserved overall. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on about 1 acre and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 760 acres. Special features would be preserved.
Impacts on Vegetation	Special status plant species would not be significantly affected. The 681 acres of projected surface disturbance would affect less than 4 percent of the pinyon-juniper woodland and sagebrush types in the WSA.	Implementation of the All Wilderness Alternative would not affect the vegetation resource in the WSA. Special status plant species would be protected.
Impacts on Mineral and Energy Exploration and Production	Implementation of the No Action/No Wilderness Alternative would not adversely affect mineral exploration or production.	Wilderness designation would preclude or severely constrain potential exploration and development of significant deposits of oil, gas, and coal. Loss or exploration and development opportunities for other mineral and energy resources would not be significant.

THE BLUES WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives	
	Recommendation No Action/No Wilderness	All Wilderness (19,030 Acres)
Impacts on Wildlife Habitat and Populations	Wildlife would not be significantly affected by this alternative in the foreseeable future. Big game habitat would be improved on vegetation treatment areas. Threatened, endangered, or other special status species would not be significantly affected.	Wilderness designation would preclude 600 acres of vegetation treatments designed to improve big game habitat and livestock forage, but would provide all species with additional opportunities for solitude.
Impacts on Livestock Management	Implementation of the No Action/No Wilderness Alternative would not adversely affect current livestock management practices in the WSA. The proposed vegetation treatments would be allowed which would provide up to 56 AUMs of additional livestock forage.	Wilderness designation would not significantly affect current livestock management practices. However, restricting motorized use of the 5 miles of way could increase management costs and inconvenience permittees. The opportunity for an increase of 56 AUMs through vegetation treatments would be foregone.
Impacts on Economic Conditions	No loss of local employment or income occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development in the long-term future. Local communities would be significantly affected.	Wilderness designation would not significantly affect present local or regional economic conditions. However, new leasing in the WSA would not be allowed; therefore, potential future sales and revenues from leasable minerals (oil, gas, and coal) would be foregone. Any beneficial or adverse affects from long term development of oil, gas, and coal would not occur.

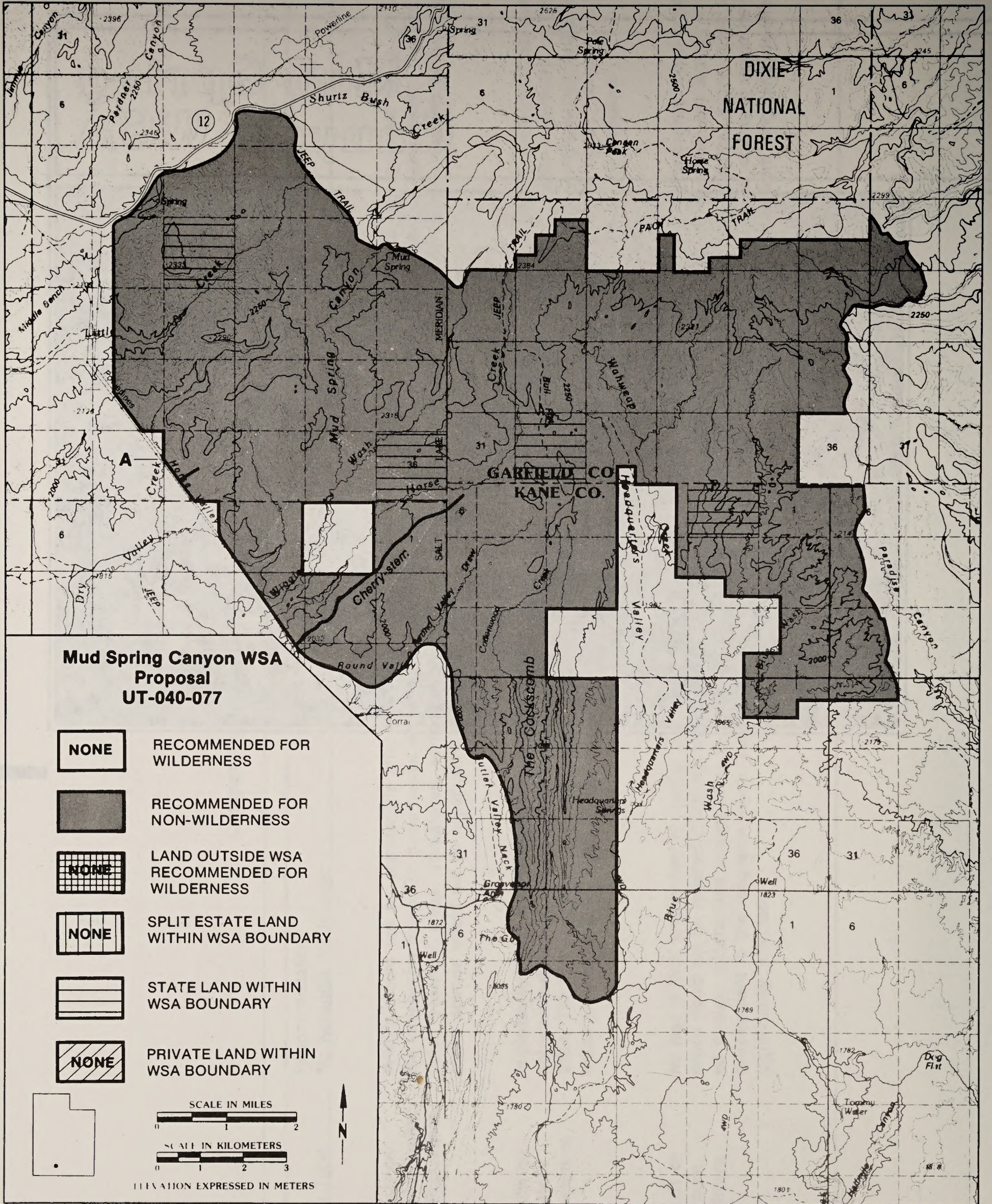
Mud Spring Canyon WSA



MUD SPRING CANYON WSA

R. 1 W.

R. 1 E



T. 37 S.

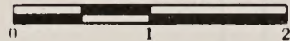
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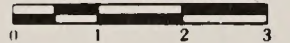
Mud Spring Canyon WSA Proposal UT-040-077

- NONE RECOMMENDED FOR WILDERNESS
- RECOMMENDED FOR NON-WILDERNESS
- NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
- NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
- STATE LAND WITHIN WSA BOUNDARY
- NONE PRIVATE LAND WITHIN WSA BOUNDARY

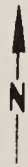
SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS



MUD SPRING CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 38,075 acres

The Mud Spring Canyon Wilderness Study Area (WSA) (UT-040-077) is in south-central Garfield County and north-central Kane County, about 4 miles east of Henrieville, Utah (population 167). The WSA contains 38,075 acres of public land administered by the Bureau of Land Management (BLM) (see Map).

Approximately 22,500 acres are in Garfield County and 15,575 acres are in Kane County. The WSA is 12 miles long, from north to south, and 11 miles wide from east to west, and includes four sections (2,402 acres) of State land, but no private or split-estate lands (see Table 1). Bryce Canyon National Park is about 13 miles west of the WSA.

The WSA is bordered for about 6 miles on the northeast by the Dixie National Forest, by State Highway 12 and other roads on the northwest, secondary roads on the east, section and subsection lines on the southeast, and roads and a powerline on the west (see Map). Two State sections in the western part of the WSA are excluded from the study area because both sections are accessible from a short, unimproved road. The Blues WSA (UT-040-268) is adjacent to the northwest, separated from the Mud Spring WSA by State Highway 12.

The eastern part of the WSA is predominantly badlands composed of soft sandstones and the blue-gray Kaiparowits Formation.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	38,075
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	2,402
Total	40,477
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	38,075
Split-Estate	0
Total BLM land not recommended for wilderness	38,075
In-holdings (State, Private)	2,402

Source: BLM File Data

MUD SPRING CANYON WILDERNESS STUDY AREA

The southern part of the WSA includes the north end of The Cockscomb, a north-south oriented ridge, prominent in south-central Utah. The western portion consists of cliffs and benches dissected by southwesterly trending drainages. Wahweap Creek drains southward for 4 miles in the central part of the WSA. The dominant vegetative type is pinyon-juniper woodland with a sparse understory.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative, which is the recommendation in this report, and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE

0 acres
(recommended for wilderness)
38,075 acres
(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

Long-term potential for coal development outweighs the value of wilderness in the WSA. The WSA contains an estimated 270 million tons of coal, about half of which could be recovered by underground mining.

Wilderness values in the WSA are not exceptional or of generally high quality. Mud Spring Canyon WSA does not include any high quality scenery and less than half of the WSA provides outstanding opportunities for solitude and primitive recreation (47 and 38 percent, respectively). Current primitive, or nonmotorized, recreational use is estimated to be only 5 visitor days annually.

Although exploration and development of coal is not expected in the short term, in view of the long-term potential and the relatively low quality of wilderness values BLM believes that Mud Spring Canyon WSA should not be designated as wilderness. Wilderness designation would curtail mineral development.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The naturalness attributes of the WSA are considered to be very diverse with discrete areas of natural character found in the badlands of the upper Wahweap and Right Hand Collet Canyon areas, in the Cockscomb Formation, and in the escarpment of canyons and benches northwest of the Cockscomb. The criteria for naturalness are substantially met on more than 99 percent of the WSA. The only imprints of human activity are 3 miles of ways, 2.5 miles of livestock fences, seven reservoirs, and a reclaimed oil and gas exploration site. These imprints are substantially unnoticeable.

B. Solitude

About 18,000 acres (47 percent of the WSA) include terrain or vegetative screening that provides outstanding opportunities for solitude.

Solitude can be found in the badlands, The Cockscomb, and the dissected cliffs from Henrieville Creek to Horse Creek. Although the remaining 20,075 acres (53 percent) of the WSA provide opportunities for solitude, these opportunities are not comparable to the outstanding opportunities found in areas such as the badlands or The Cockscomb.

C. Primitive and Unconfined Recreation

Approximately 14,600 acres, or 38 percent of the WSA, include outstanding opportunities for primitive recreation.

MUD SPRING CANYON WILDERNESS STUDY AREA

Diverse activities for which there are exceptional opportunities are hiking, backpacking, horseback riding, rock climbing, and hunting.

Opportunities for hiking and hunting exist throughout the WSA, and there are few if any parts of the WSA where these activities could not be pursued.

Rock climbing, on the other hand, is limited to the western and central portions of the WSA where there are cliffs.

The badlands, The Cockscomb, escarpments and benches in the northwest, and several canyons provide backpacking opportunities. The terrain somewhat limits riding opportunities, but several areas can be negotiated on horseback.

The remaining 23,475 acres (62 percent) of the WSA lack either the diversity of opportunities or the type of opportunity for a specific activity which would meet the standards for outstanding opportunities for primitive recreation.

D. Special Features

A waterfall on a perennial stream blocks the entrance to Dry Valley Creek Canyon, which remains in its natural condition and may be a relict ecosystem. About 200 acres are within this area, which may have important scientific values.

Peregrine falcons, an endangered species, may inhabit the WSA.

U.S. Fish and Wildlife Service (FWS) candidate threatened or endangered

animal species that may be found in the WSA include the ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, white-faced ibis, and Great Basin Silverspot butterfly. A FWS candidate plant species that may grow in the WSA is Lepidium montanum var. stellae.

Other FWS candidate plant species that may occur in the WSA are Lepidium montanum var. neeseae, Heterotheca jonesii, Coryphantha missouriensis var marstonii, and Psoralea pariensis.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS. PNV is the vegetation that would develop over time if undisturbed by human interference. The WSA is in the Colorado Plateau Province/Ecoregion, and the PNV is juniper-pinyon woodland. Potential juniper-pinyon woodland is represented nationally in the NWPS, is well represented in BLM study areas both in and outside of Utah, and is represented in the Box-Death Hollow Wilderness in the Dixie National Forest in Utah. This information is summarized in Table 2 from data compiled in December 1989.

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,105,930
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,668,123

Source: BLM File Data.

MUD SPRING CANYON WILDERNESS STUDY AREA

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Provo-Orem, Utah standard metropolitan statistical area. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of this population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The Mud Spring WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 64 wilderness areas comprising 2,834,115 acres in Utah and Arizona.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Provo-Orem, Utah	11	721,793	90	2,748,793

Source: BLM File Data.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the northeast are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 37,300-acre Grand Wash Cliffs Wilderness (BLM), the 7,000-acre Ashdown Gorge Wilderness (FS), and the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The Mud Spring Canyon WSA could be effectively managed as wilderness in the foreseeable future. There are no existing coal leases in the study area. There are 680 acres of post-FLPMA oil and gas leases in the WSA, but these leases are subject to nonimpairment of wilderness values and it is expected that they will expire and not be renewed

if the area is designated wilderness. There are no mining claims in the WSA and development of locatable minerals is not projected in the foreseeable future.

Livestock grazing and maintenance of seven livestock reservoirs and 2.5 miles of fence would continue, and would not significantly affect the wilderness values of the WSA. Maintenance of about a 0.25 mile of water pipeline in two existing rights-of-way also would not unduly reduce wilderness values in the area as a whole. There are four sections (2,402 acres) of State land inheld in the WSA. Because of the known coal resources in the WSA, it is projected that in the long term new access roads to the State land would be required through the area following wilderness designation. Additionally, any coal mining operations on the State Lands would reduce wilderness values on the adjacent wilderness.

Energy and Wilderness Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area.

MUD SPRING CANYON WILDERNESS STUDY AREA

According to BLM geologists, the potential for coal resources is high. The WSA is in the Kaiparowits Known Recoverable Coal Resource Area (KRCRA). Up to 270 million tons of coal, about half of which is recoverable by underground mining, are within the WSA at depths of 1,000 to 3,000 feet beneath the surface. The coal is of moderate quality, with an average heat value of 11,000 Btus and low sulfur content. Favorability that oil and gas resources are within the WSA is low to moderate, and the degree of certainty that these exist is very low. The potential for the recovery of uranium and other metallic minerals is low. The energy potential for geothermal sources is also low. Small deposits of stream gravel and other loose rock usable in construction are in the WSA but are not economically significant because of ample supplies of similar materials elsewhere in the vicinity.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

BLM's recommendation is to release the WSA for uses other than wilderness. With implementation of the recommended action, there would be no loss of local employment or income. Opportunity to explore and develop mineral and energy resources would remain as at present. Oil and gas leasing would be open on 37,395 acres which currently are not leased, and exploration could occur. The effects on local economy would be relatively minor and temporary, however: total employment would not exceed 40 and would last about 2 years.

Coal could be leased without consideration for wilderness values. No coal mining is anticipated in the short term, but exploration and mining could occur in the next 30 years. If coal mining occurs, the effects on the local economy would be significant, but it is not possible to predict if any mines actually

would be within the WSA boundaries. Local communities would be expected to provide housing and infrastructures and some local people might be employed.

Mineral leasing would bring revenues to the Federal government and, if production of resources results, would also bring royalties. Half of these monies would be returned to the State of Utah, and a portion of that may reach local economies.

Livestock-related economic conditions would not change, because there would be no effect on livestock grazing management. Rangeland improvements are expected to increase carrying capacity for grazing by 50 percent, which would be a small but noticeable benefit to livestock permittees. Recreation-related local expenditures could increase if recreational use increases regionally and nationally for the next 30 years, as it is predicted to, but local expenditures directly attributable to use of the WSA would not be significant.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 60 inputs specifically addressing this WSA were received from 70 commenters including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 44 commenters supported wilderness designation for part or all of the WSA, while 21 commenters were opposed. Five commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

MUD SPRING CANYON WILDERNESS STUDY AREA

Those favoring wilderness commented on special features in the WSA, general wilderness values, and lack of conflict with mineral values. The majority of those commenting in favor of wilderness were from outside of Utah. Of particular concern was the need to protect wilderness values from development.

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development and harm local economy. Some felt that there is no need to designate more wilderness. Most of the commenters opposing wilderness were from rural Utah, but a significant number were from outside the state.

Two Federal agencies, the FS and Environmental Protection Agency (EPA) commented on the Draft EIS. The FS stated that the Dixie National Forest concurs with the recommendation to not propose wilderness in the WSA. The EPA took no formal position on wilderness designation but suggested that transportation proposals are important factors in the evaluation of the long-term coal development feasibility of the WSA.

No comment letters were received on the Final EIS.

There are two sections (2,402 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State considers the relatively low-quality wilderness values to be outweighed by the high degree of conflict associated with minerals, land treatments, and transportation corridors. The State suggests that special features be given an alternative management designation such as Research Natural Area (RNA) for Dry Valley Creek Canyon and Scenic Area designation for the Cockscomb area.

Both the Garfield and Kane County Commissions are opposed to wilderness designation of the Mud Spring Canyon WSA and have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the

Draft EIS the Counties supported BLM's no action/no wilderness proposed action.

The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. Garfield County previously proposed to the Utah Congressional Delegation that 111,053 acres of BLM lands in three WSAs and 31,600 acres in one FS unit in the County be recommended as wilderness. The Garfield County Master Plan recommends that the remaining lands in the County, including the Mud Spring Canyon WSA, be retained for multiple uses.

MUD SPRING CANYON WSA

Table 4
Summary of Environmental Consequences

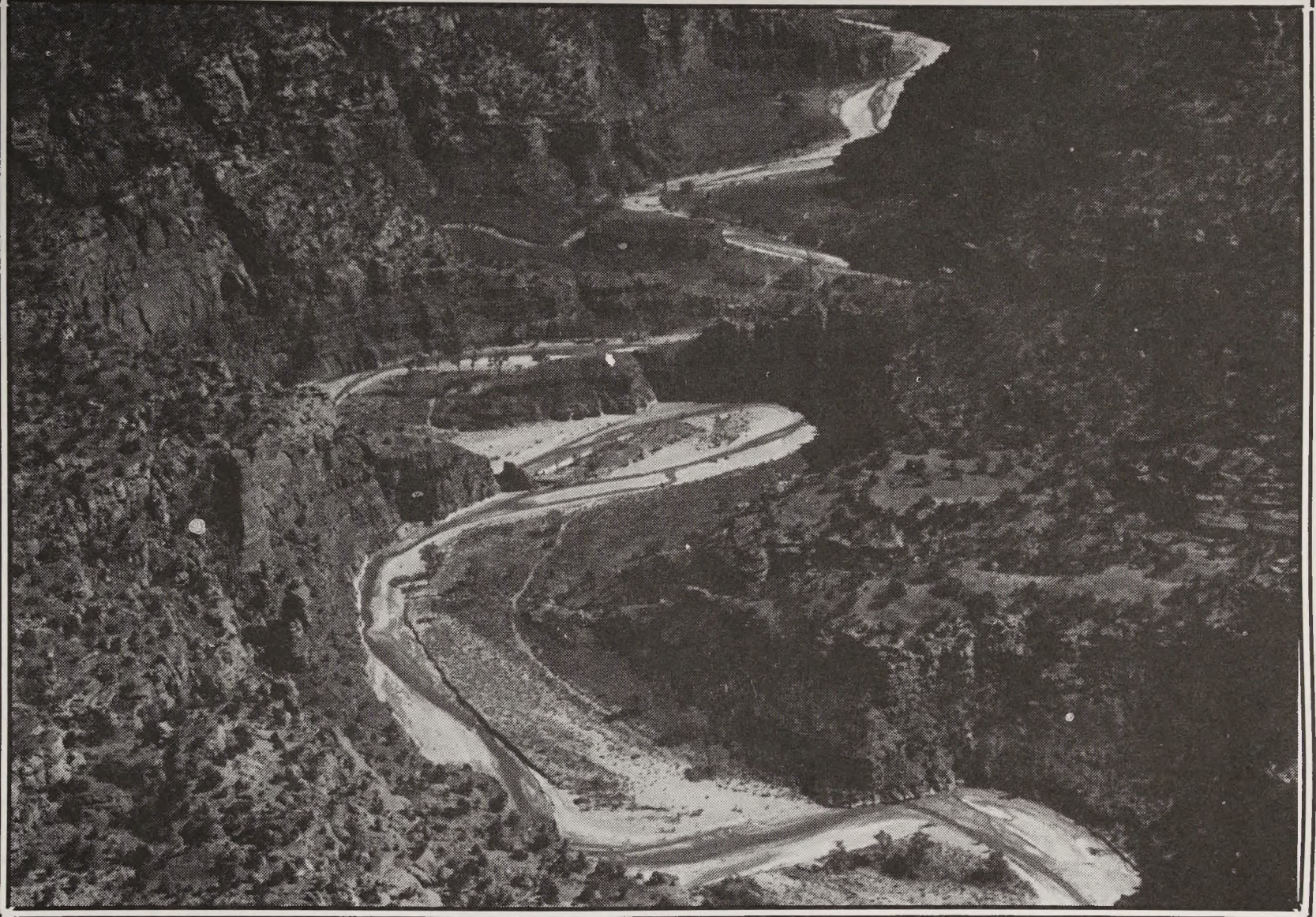
Issue Topic	Recommendation No Action/No Wilderness	Alternatives	All Wilderness (38,075 Acres)
Impacts on Wilderness Values	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 1,048 acres and indirectly reduced in quality on up to an additional 7,900 acres due to rangeland and coal development activities. Special features would not be significantly affected.	Designation would preserve wilderness values throughout the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be slightly reduced in quality on about 3 acres due to rangeland projects. There would be no loss of wilderness values due to coal development.	
Impacts on Vegetation	Special status plant species would not be significantly affected. The 1,048 acres of projected surface disturbance would affect less than 3 percent of the pinyon-juniper and sagebrush types in the WSA.	The vegetation resources would not be adversely affected because the area would be protected from surface disturbance.	
Impacts on Mineral and Energy Exploration and Production	Mineral and energy exploration and development would not be affected because the area could be claimed, leased, and developed as at present.	Exploration or development opportunities for significant known coal resources would be precluded. Loss of exploration and development opportunities for other mineral and energy resources would not be significant.	

MUD SPRING CANYON WSA

Table 4 (Continued)
Summary of Environmental Consequences

Resource	Alternatives	
	Recommendation No Action/No Wilderness	All Wilderness (38,075 Acres)
Impacts on Wildlife Habitat and Populations	Threatened, endangered, or other special status species would not be significantly affected. Implementation of the wildlife and rangeland water projects would benefit wildlife by providing additional water, forage, and ecotones.	Wilderness designation would preclude 1,000 acres of vegetation treatments and reservoirs, but would provide all species with additional opportunities for solitude.
Impacts on Livestock Management	Livestock grazing would not be adversely affected. The 1,000 acres of vegetation treatments would result in an increase of about 125 AUMs.	Vehicular use restriction on 3 miles of way would inconvenience livestock operators in the area, and increase the costs of livestock management. The opportunity for an increase of up to 125 AUMs through vegetation treatments would be foregone.
Impacts on Economic Conditions	Present local and regional economic conditions would not be significantly affected. Economic opportunities could be realized through coal exploration and eventual development in the long term. Local communities would be significantly affected.	There would not be immediate significant changes in present local or regional economic conditions. However, new leasing in the WSA would not be allowed. Therefore, potential sales and revenues for leasable minerals would be foregone. Beneficial and adverse effects from long-term development of coal would not occur. Prohibiting certain proposed rangeland developments would result in the foregoing of 125 AUMs and associated economic returns.

Paria - Hackberry
WSA



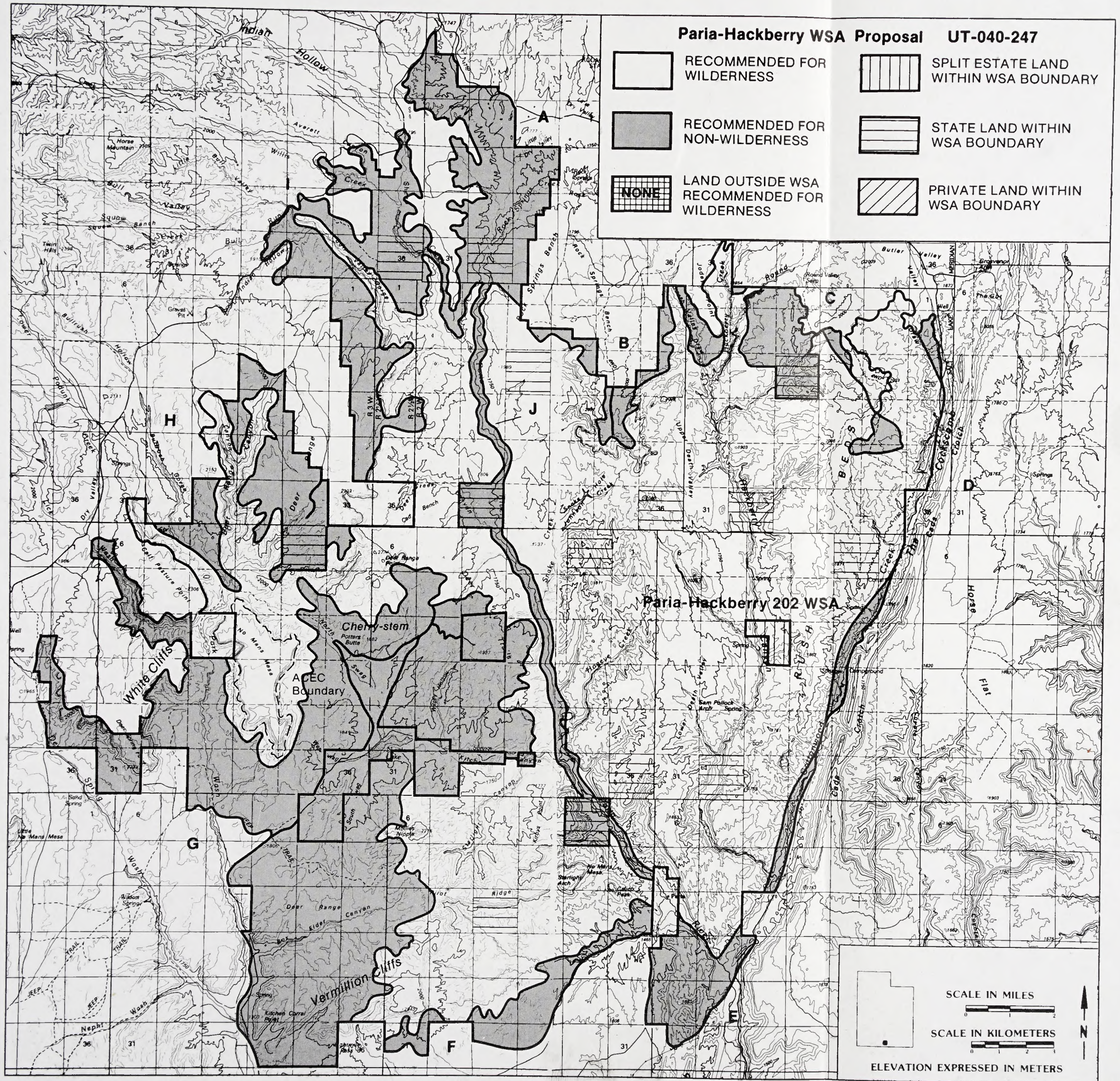
PARIA-HACKBERRY / PARIA-HACKBERRY 202 WSA

T. 38 S.

T. 39 S.

T. 40 S.

T. 41 S.



PARIA-HACKBERRY/PARIA-HACKBERRY 202 WILDERNESS STUDY AREA

1. THE STUDY AREA: 136,222 acres

The Paria-Hackberry/Paria-Hackberry 202 Wilderness Study Area (WSA) (UT-040-247/UT-040-247A) is in central Kane County, 30 miles east of Kanab, Utah (population 2,148). The study area includes 136,222 acres of public land administered by the Bureau of Land Management (BLM) (see Map). Inheld within the boundaries of the WSA are fourteen sections (9,019 acres) of State land, and 40 acres of private land (see Table 1).

A 400-acre parcel of State land in the eastern portion of the WSA was reconveyed to the Federal government with the State retaining mineral ownership. This split-estate land was analyzed under Section 202 of the Federal Land Policy and Management Act (FLPMA) as UT-040-247A and is included as part of the Paria-Hackberry/Paria-Hackberry 202 WSA. Five State sections and 4 parcels of private land are excluded from the WSA by a cherrystem that includes a road which provides access to those lands.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	135,822
Split-Estate (BLM surface only) ^b	400
In-holdings (State, Private)	9,059
Total	145,281
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	95,042
BLM (outside the WSA)	0
Split-Estate (within the WSA)	400
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	95,442
In-holdings (State, private)	5,120
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	41,180
Split-Estate	0
Total BLM land not recommended for wilderness	41,180
In-holdings (State, Private)	3,939

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings and/or split-estate tracts included within the portion of the WSA recommended for designation.

^b In this report, split-estate lands are defined as only those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface are classified according to the owner of the surface.

PARIA-HACKBERRY/PARIA-HACKBERRY 202 WILDERNESS STUDY AREA

Eight sections of State land (5,120 acres) and the 400 acres of split-estate land are within the portion of the WSA that is recommended for wilderness.

West of the WSA and separated by a County road is the Wahweap WSA (UT-040-248). The WSA also is contiguous with The Cockscomb WSA (UT-040-175) on the southeast. The eastern boundary of the WSA is defined by the county road along Cottonwood Creek and The Cockscomb. Other boundaries are determined by many factors including the mixed presence of roads, utility lines, and private and State lands. Portions of the study area boundary avoid areas with chainings and other surface disturbances that would not meet the wilderness inventory standards for naturalness.

The study area includes much of the Paria River and Hackberry Creek drainages between U.S. Highway 89 on the south and Cannonville on the north. Elevation ranges from 4,700 feet on the Paria River at the south end of the WSA to 7,200 feet in the west-central and the northern part of the study area. The varied terrain includes plateaus, benches, a portion of The Cockscomb ridge, scattered sand dunes, rock knobs and domes, and natural arches. The predominant vegetation type is pinyon-juniper woodland.

The WSA was studied under Sections 202 and 603 of FLPMA and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Four alternatives were analyzed in the EIS: a partial wilderness alternative where 95,042 acres would be designated as wilderness and the remaining 41,180 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; an all wilderness alternative; and a smaller partial wilderness alternative of 59,670 acres of public land.

2. Recommendation and Rationale

95,042 acres
(recommended for wilderness)
41,180 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 95,042 acres of the WSA

as wilderness, and to release the remaining 41,180 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The recommendation would include eight sections (5,120 acres) of State lands and 400 acres of split-estate. It would also include 88 percent (83,730 acres) of the portion of the WSA with outstanding opportunities for solitude, 90 percent (85,530 acres) of the portion with outstanding opportunities for primitive recreation, and 97 percent (95,042 acres) of the portion with exceptional scenic values. Other special features would be preserved, including the scientific values on No Man's Mesa. The boundary of the recommended area would essentially be a "reduced" version of the WSA in the western part (see Map), splitting the WSA into two parts to provide for a north-south transportation corridor (Areas A, J, and E) near the center of the WSA, and would retain most of the eastern part of the study area.

The portion of the WSA that would be released for uses other than wilderness includes areas with the most likelihood of conflicts with wilderness management. Current BLM land use plans provide for use of the nondesignated portion in a manner which would protect wilderness and other special values, while allowing nonwilderness uses. Those parts of the WSA with fewer wilderness values would be available for rangeland improvements (Areas A, B, C, G, H, and I), off-highway vehicle use (Area J), and mineral and energy exploration and development (Areas F and G). Potential routes for future transportation of coal through the region have been identified in at least two studies of coal development in the Kaiparowits Plateau and these routes would include Areas D, E, and J, and A of the WSA. The recommended portion of the WSA excludes a strip of land area that could accommodate a corridor for coal transportation. Vehicular use along the dry bed of the Paria River

PARIA-HACKBERRY/PARIA-HACKBERRY 202 WILDERNESS STUDY AREA

in Areas A and J also could continue, where seasonal stream flows would remove signs of disturbance from the riverbed.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Situated upstream from the Paria Canyon-Vermilion Cliffs Wilderness, the Paria-Hackberry WSA is the largest block of undisturbed lands on the Paria River drainage between U.S. Highway 89 and Bryce Canyon National Park. The naturalness attribute is of extremely high quality. Large size contributes to the remoteness of the WSA. Located at the eastern edge of the Grand Staircase, the naturalness character of the WSA is enhanced with high scenic values. More than 99 percent of the WSA is in a natural condition. Short drift fences, vehicular ways, log skid trails, corrals, cabins, sheds, a buried 0.75-mile long pipeline, and mining prospects affect the naturalness on a total area of less than 100 acres. These features have weathered or have been reclaimed so that they are substantially unnoticeable.

B. Solitude

Outstanding opportunities to find solitude exist on about 89,700 acres, or 66 percent of the WSA. Approximately 88 percent of the portion recommended for wilderness designation, 83,730 acres, have this quality. Most of these opportunities are due to screening by the terrain.

The White and Vermilion Cliffs are an irregular but continuous barrier that provides isolation. No Man's Mesa is an island-like landform that is completely isolated by the White Cliffs and provides exceptional opportunity for solitude. Many of the canyons provide opportunities for solitude, enhanced in some areas by vegetative screening. Benches provide solitude where sandstone expo-

surens have eroded and formed domes, fins, and bare rock flats.

The remaining 46,522 acres (34 percent of the WSA) do not provide outstanding opportunities for solitude, particularly in open areas where sandstone is not exposed.

C. Primitive and Unconfined Recreation

Outstanding opportunities for primitive and unconfined recreation can be found on approximately 90,100 acres, or 66 percent of the WSA. Approximately 87,400 acres have outstanding opportunities for both solitude and primitive recreation. Ninety percent, or 85,530 acres, of the recommended portion would provide outstanding opportunities for primitive recreation.

Primitive recreation activities with exceptional attributes include hiking, backpacking, horseback riding, exploring, rock climbing, rockhounding for petrified wood and agate, and sightseeing for geology and photography.

Hiking, backpacking, and exploring opportunities are exceptional in the winding canyons and in rock outcrops which are scenic and dissected. Horseback riding is somewhat more limited because of rough terrain in some areas. Rock climbing is limited to cliff faces, but cliffs are common in the WSA and are in parts of the WSA which can be reached relatively easily on foot. Rockhounding areas are found below the Vermilion Cliffs and extend up the Paria River Canyon to Starlight Canyon.

D. Special Features

A relict plant association on top of No Man's Mesa has scientific value. Inasmuch as this community is undisturbed, it provides a "living museum" of pristine vegetation and standards with which to compare nearby plant communities affected by land management practices. No Man's Mesa has been designated by the BLM as a Research Natural Area for its scientific value.

All of the portion recommended for wilderness designation is of outstanding scenic quality. The Paria River marks the eastern edge of the Grand Staircase,

PARIA-HACKBERRY/PARIA-HACKBERRY 202 WILDERNESS STUDY AREA

the southern edge of the High Plateaus of Utah Section of the Colorado Plateau Physiographic Province. The Grand Staircase was so named by early geologists because it is an ascending series of colored cliffs and terraces. At Bull Valley Gorge and Deer Creek Canyon, in the northwestern part of the WSA, the eastern end of the White Cliffs of the Grand Staircase is 600 to 1,000 feet high and is cut by eight canyons. East of the Paria River, the same sandstone as in the White Cliffs is exposed but is more sculptured and dissected. A portion of the terrace of the Vermilion Cliffs, the "Grand Stair" below the White Cliffs, is in the southwestern portion of the WSA. Below the cliffs are multi-colored badlands.

No threatened or endangered plant species are known to grow in the WSA. Five U.S. Fish and Wildlife Service (FWS) candidate threatened or endangered plant species which may occur in the WSA are Psoralea epipsila, Psoralea pariensis, Penstemon ammophilum, Lesquerella tumulosa, and Xylorhiza cronquistii.

The endangered bald eagle and peregrine falcon and the golden eagle, considered by the BLM to be a sensitive species, may occasionally visit the WSA. Other animal species that may inhabit the WSA include the FWS candidate ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, Arizona Bell's vireo, western snowy plover and white-faced ibis.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS. The PNV of the WSA, which would develop if the area remains undisturbed by human interference, is in the Colorado Plateau Province/Ecoregion and includes juniper-pinyon woodland (111,000 acres) and saltbush-greasewood (25,222 acres). Both types are well represented in other BLM WSAs. Juniper-pinyon woodland is also widely represented in WSAs outside of Utah, but would develop in only one designated wilderness in Utah. Saltbush-greasewood is represented in the NWPS in only one area, which is in Utah.

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of this population center.

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,033,005
Saltbush-Greasewood	1	20,000	17	368,781
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,606,198
Saltbush-Greasewood	1	20,000	17	368,781

Source: BLM File Data.

PARIA-HACKBERRY/PARIA-HACKBERRY 202 WILDERNESS STUDY AREA

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	54	2,040,276

Source: BLM File Data.

C. Balancing the Geographic Distribution of Wilderness Areas

The Paria-Hackberry WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 64 wilderness areas comprising 2,834,115 acres in Utah and Arizona. Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the northeast are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), the 7,880-acre Mt. Trumbull Wilderness, (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 37,300-acre Grand Wash Cliffs Wilderness (BLM), the 7,000-acre Ashdown Gorge Wilderness (FS), and the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The entire WSA could be managed as wilderness. In the portion of the WSA that is recommended for wilderness designation closure to most surface-disturbing activities would preserve wilderness values, and projects designed to produce minimal impacts would enhance wildlife habitat by providing more water and vegetation. Elimination of off-road vehicle use would improve opportunities for solitude and primitive recreation.

There are 16,560 acres of post-FLPMA oil and gas leases in this part of the WSA, but these leases are subject to nonimpairment of wilderness values and it is expected that they will expire and not be renewed if the area is designated wilderness. There also are 80 acres of mining claims in this part of the WSA, but development of locatable minerals is not projected in the foreseeable future.

Livestock grazing and maintenance of existing rangeland developments would continue in the WSA, but would not significantly affect the wilderness values.

There are 14 sections (9,019 acres) of State land, 400 acres of split-estate land with State minerals, and 40 acres of private land scattered throughout the WSA (see Table 1). Provision of access to these lands would interfere with wilderness management, but access to these lands would likely not be required in the foreseeable future.

The portion of the WSA released for uses other than wilderness also could be managed as wilderness. However, protection of wilderness values in the nondesignated area would be more difficult than in the recommended area. Because the Paria Riverbed has traditionally been used as an access route, constant monitoring by BLM would be required to prevent the use of vehicles along the riverbed.

There are 8,640 acres of post-FLPMA leases in this part of the WSA, but these leases are subject to nonimpairment requirements and are not expected to be developed.

PARIA-HACKBERRY/PARIA-HACKBERRY 202 WILDERNESS STUDY AREA

Energy and Mineral Resource Values

The U.S. Bureau of Mines (USBM) conducted a study of 59,270 acres in the WSA (USBM Open File Report 34-86, S. Brown and B.J. Hannigan, 34-86). In October 1988, the USBM studied an additional 35,372 acres in the WSA (USBM Mineral Land Assessment Open File Report 34-89, John. R. Thompson, 1989). The total acreage of these studies, 94,642 acres, is essentially the portion of the WSA that is recommended for wilderness designation. The reports concluded that the study area may contain oil and gas deposits because the stratigraphy of the study area closely resembles that of the Upper Valley oil field, and the structural setting is similar. Coal occurs nearby, but there are no coal-bearing formations near the surface inside the study area. There are no indications of uranium occurring near the surface in the study area. No other energy materials are present in the study area.

Sandstone and sand occur in the study area, but will probably never be exploited. No occurrences of metals were found on the surface in the study area, although copper, lead, and manganese were found outside the study area. Gypsum occurs just outside the northern part of the study area. Gypsum does not occur on the surface in the study area, but may be found at depth.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 278 inputs specifically addressing this WSA were received from 545 commenters including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 514 commenters supported wilderness designation for part or all of the WSA, while 23 commenters were opposed. Eight commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

The majority of those commenting in favor of wilderness designation were from outside of Utah. Of particular concern was the need to protect wilderness values from development, preserve wilderness values for future generations, and add the diversity of Utah landforms to the NWPS.

Those opposing wilderness were concerned that wilderness would restrict access by the general public, harm State and local economies, prohibit mineral exploration and development, and curtail livestock and wildlife management. Most of the commenters were from rural Utah.

Two Federal agencies, the FS and USBM commented on the Draft EIS. The FS stated that the Dixie National Forest concurs with the proposed wilderness in the Paria-Hackberry WSA. The USBM did not take a position regarding designation or nondesignation but commented that BLM has overstated the uranium potential of the Chinle and Moenave Formations. The USBM also commented that their investigations indicated that as of October 1984, there were no mining claims in the WSA.

No comment letters were received on the Final EIS.

There are 14 sections (9,019 acres) of State land in the WSA and 400 acres of split-estate land with State owned

PARIA-HACKBERRY/PARIA-HACKBERRY 202 WILDERNESS STUDY AREA

minerals. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the WSA is considered to rank high in both wilderness values and conflicts. The 59,670-acre partial alternative would mitigate many of the conflicts while retaining most of the high wilderness values. Conflicts that would not be mitigated include oil and gas potential and land treatment for livestock and wildlife. The 59,670-acre partial alternative would allow for further consideration of coal transportation corridors and the improvement of the Cottonwood Canyon road. The State comment supports the designation of No Mans Mesa as a Research Natural Area (RNA).

The Kane County Commission is opposed to wilderness designation of the Paria-Hackberry WSA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. In commenting on the Draft EIS, the County noted that the WSA should not be designated as wilderness because it has been found to contain favorable conditions for recovery of oil and natural gas in the north and eastern sections; truck and rail corridors for transportation of Alton and Kaiparowits coal traverse the WSA and are important to the economic well-being of the region; and the No Mans Mesa has been protected as a RNA.

PARIA HACKBERRY/PARIA-HACKBERRY 202 WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives	
Recommendation	Alternatives
<p>Large Partial Wilderness (95,042 Acres)</p> <p>Wilderness values would be preserved in the designated area which is approximately 70 percent of the WSA. Because of vegetation treatments and range-land developments, naturalness and opportunities for solitude and primitive recreation would be directly lost or indirectly reduced in quality on 814 acres of the WSA. Of this, only 300 acres would be directly lost. Vehicular use of 22 miles of ways and the 2.5 miles of the Paria riverbed in the nondesignated area would continue to be an annoyance that would detract from opportunities for solitude and primitive recreation in the WSA. Most special features would be preserved; however, continued ORV use in the nondesignated area would result in inadvertent or intentional disturbance of cultural and wildlife special features.</p>	<p>No Action/No Wilderness</p> <p>Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on about 4,251 acres and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to an additional 6,810 acres due to vegetation treatments, rangeland developments, and development of an utility right-of-way. Most special features including relict plant communities, perennial streams, special status animal and plant species, cultural values, and wildlife associated with wilderness would not be affected by development-related disturbance. Some Class A scenery would be disturbed. Special features that would be disturbed by continued ORV use are cultural values and sensitive wildlife species. Vehicular use of 33 miles of existing ways and about 25 miles of the Paria riverbed would continue to be an annoyance that would detract from solitude and primitive recreation opportunities in the WSA.</p>
<p>Small Partial Wilderness (59,670 Acres)</p> <p>Wilderness values would be preserved in the designated area which is approximately 44 percent of the WSA. Because of vegetation treatments and range-land developments, naturalness and opportunities for solitude and primitive recreation would be directly lost or indirectly reduced in quality on about 3,414 acres of the WSA. Of this, only 1,314 acres would involve direct loss. Vehicular use of 29.5 miles of ways and 2.5 miles of the Paria riverbed in the nondesignated area would continue to be an annoyance that would detract from opportunities for solitude and primitive recreation in the WSA. Some special features would be preserved; however, continued ORV use in the nondesignated area would result in inadvertent or intentional disturbance of cultural and wildlife special features.</p>	<p>All Wilderness (136,222 Acres)</p> <p>Wilderness designation would preserve wilderness values in the WSA. Naturalness and opportunities for solitude and primitive recreation would be directly or indirectly reduced in quality on 34 acres. Only 14 acres would be directly disturbed. These impacts would be due to development of rangeland projects. Wilderness management criteria would be met. Special features including Class A scenery, relict plant species on No Man's Mesa, perennial streams, special status plant and animal species, wildlife commonly associated with wilderness, and cultural values would be preserved.</p>

PARIA HACKBERRY/PARIA-HACKBERRY 202 WSA

Table 4 (Continued) Comparative Summary of Impacts by Alternative

Alternatives

Issue Topic	Recommendation Large Partial Wilderness (95,042 Acres)	No Action/No Wilderness	All Wilderness (136,222 Acres)	Small Partial Wilderness (59,670 Acres)
Impacts on Soils	<p>A slight (0.5 percent) increase in annual soil loss would be expected for a 2 to 3 year period followed by a reduction in annual soil loss as seedlings were established following vegetation treatments.</p> <p>Special status plant species would not be significantly affected. The 314 acres of projected surface disturbance would affect less than 1 percent of the acreage in the WSA. Therefore, vegetation types would not be significantly affected.</p>	<p>There would be a 5.8 percent temporary increase in soil loss resulting from vegetation treatments, rangeland developments, and an utility corridor. The vegetation treatments would eventually reduce erosion rates in the WSA and soil loss would be less than at present.</p> <p>Special status plant species would not be significantly affected. The 4,251 acres of projected surface disturbance would affect about 11 percent of the pinyon-juniper woodland and sagebrush types in the WSA.</p>	<p>Development projects which would reduce erosion rates from the WSA would not be allowed and erosion rates would remain at current levels.</p> <p>Vegetation types would be maintained and the five sensitive species in the WSA would receive additional protection.</p>	<p>A slight (1.8 percent) increase in annual soil loss would be expected for a 2 to 3 year period followed by a reduction in annual soil loss as seedlings were established following vegetation treatments.</p> <p>Special status plant species would not be significantly affected. The 1,314 acres of projected surface disturbance would affect about 1 percent of the WSA. Therefore, vegetative types would not be significantly affected.</p>
Impacts on Water Resources	<p>This alternative would result in an insignificant (0.4 percent) and temporary (2 to 3 year) increase in sedimentation and TDS production due to 300 acres of vegetation treatments.</p>	<p>This alternative would result in a 5.8 percent temporary (2 to 3 years) increase in sedimentation and TDS due to vegetation treatments and rangeland developments. Over the long term, the water quality and uses would not be adversely affected.</p>	<p>Wilderness designation would not significantly alter present or future water quality or uses.</p>	<p>This alternative would result in a temporary (2 to 3 year) (1.8 percent) increase in sedimentation and TDS production due to 1,300 acres of vegetation treatments.</p>

PARIA HACKBERRY/PARIA-HACKBERRY 202 WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
Recommendation		No Action/No Wilderness	All Wilderness	Small Partial Wilderness
Issue Topic	(95,042 Acres)	(136,222 Acres)	(59,670 Acres)	
Impacts on Wildlife Habitat and Populations	<p>With this alternative, mule deer and ferruginous hawk would benefit from the 300 acres of vegetation treatments. However, wildlife species associated with riparian zones would be adversely affected due to continued ORV use on the Paria riverbed. Wildlife would benefit from solitude provided by wilderness designation on 70 percent of the WSA.</p>	<p>Wildlife populations would improve due to increased water availability. Some wildlife species (mule deer and ferruginous hawk) would benefit from the vegetation treatments. However, wildlife species associated with riparian zones would continue to be disturbed by ORV use on the Paria riverbed.</p>	<p>Wilderness designation would negatively impact mule deer and ferruginous hawk habitat because 4,000 acres of vegetation treatments would not be allowed. Overall, wildlife would benefit from the ORV restrictions in the Paria riverbed and from solitude in the remainder of the area.</p>	<p>With this alternative, mule deer and ferruginous hawk would benefit from the 1,800 acres of vegetation treatments. However, wildlife associated with riparian zones could be adversely affected due to continued ORV use on the Paria riverbed. Wildlife would benefit from solitude provided by wilderness designation on 44 percent of the WSA.</p>
	<p>Operating costs to 18 permittees would be slightly increased by restrictions on access to 11 miles of ways. Grazing levels would not be altered, but 1,700 acres of pinyon-juniper woodland chainings and seedings would be precluded. A potential increase of at least 170 AUMs would be foregone.</p>	<p>Livestock management and grazing practices would continue as at present. Rangeland developments and vegetation treatments would result in an increase of 200 AUMs and improved livestock distribution.</p>	<p>Wilderness designation would necessitate changes in livestock management and supervision and cause inconvenience with increased operating costs to the 46 permittees because of restrictions on access to 33 miles of ways. Development of additional forage (up to 200 AUMs) through vegetation treatments would be precluded.</p>	<p>Grazing levels would not be altered, but 1,000 acres of pinyon-juniper woodland chainings and seedings would be precluded. A potential increase of at least 100 AUMs would be foregone. Operating costs to 11 permittees would be slightly higher because of restrictions on access to 3.5 miles of ways.</p>
Impacts on Livestock Management	<p>Operating costs to 18 permittees would be slightly increased by restrictions on access to 11 miles of ways. Grazing levels would not be altered, but 1,700 acres of pinyon-juniper woodland chainings and seedings would be precluded. A potential increase of at least 170 AUMs would be foregone.</p>	<p>Livestock management and grazing practices would continue as at present. Rangeland developments and vegetation treatments would result in an increase of 200 AUMs and improved livestock distribution.</p>	<p>Wilderness designation would necessitate changes in livestock management and supervision and cause inconvenience with increased operating costs to the 46 permittees because of restrictions on access to 33 miles of ways. Development of additional forage (up to 200 AUMs) through vegetation treatments would be precluded.</p>	<p>Grazing levels would not be altered, but 1,000 acres of pinyon-juniper woodland chainings and seedings would be precluded. A potential increase of at least 100 AUMs would be foregone. Operating costs to 11 permittees would be slightly higher because of restrictions on access to 3.5 miles of ways.</p>

PARIA HACKBERRY/PARIA-HACKBERRY 202 WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Alternatives

	Recommendation Large Partial Wilderness (95,042 Acres)	No Action/No Wilderness	All Wilderness (136,222 Acres)	Small Partial Wilderness (59,670 Acres)
Impacts on Visual Resources	Visual quality would be reduced on less than 1 percent (314 acres) of the WSA due to vegetation treatments and rangeland developments. Most scenic values would be preserved.	In the foreseeable future, visual quality would be reduced on 3.2 percent (4,251 acres) of the WSA due to rangeland development, vegetation treatments and development of an utility corridor.	Wilderness designation would preserve visual resources because major surface disturbance would not be allowed. A slight reduction in visual quality would occur on 14 acres due to rangeland developments.	Visual quality would be reduced on about 1 percent (1,314 acres) of the WSA. Some scenic values would be preserved.
Impacts on Cultural Resources	Seven recorded sites in the designated wilderness portion of the WSA would be protected from vehicular activity. The remaining 34 sites would receive protection as discussed for the No Action/No Wilderness Alternative.	Inadvertent loss or damage to archaeological sites may occur due to surface disturbance and continued ORV use. Intentional vandalism and artifact collection may increase due to increased activity and accessibility. Cultural resource management would continue without regard to wilderness management restrictions.	Surface disturbance would be minimal and benefits of protection would outweigh the threat of increased vandalism due to wilderness designation. Closure to ORV activity would protect sites from unintentional damage and generally decrease accessibility in the unit. Management of cultural resources may be restricted in scope and execution due to wilderness designation.	One recorded site would receive protection as a result of wilderness designation. The remaining 40 sites would receive impacts similar to those discussed for the No Action/No Wilderness Alternative.
Impacts on Recreation	Both primitive and vehicle-oriented recreation would increase. Primitive recreational values would be protected on the 95,042-acre designated area but would be reduced in those areas left open to ORV use including the Paria River bottom. Wild and scenic values on about 25 miles of the Paria River would not receive additional protection provided by wilderness designation and would continue to be subject to ORV use.	Both primitive and vehicle-oriented recreational use would increase. Primitive recreational values would be reduced in quality near the vegetation treatments, rangeland developments, and area of utility rights-of-way development. Primitive recreational opportunities would be reduced as vehicular use increases. About 25 miles of a wild and scenic river inventory segment would not receive additional protection provided by wilderness designation and would be subject to ORV use.	Primitive recreation values would benefit from a reduction in the likelihood for surface-disturbing activities, increasing management attention, and closure of the area to ORV use. The loss of vehicular opportunity would be considered significant because the riverbed is a historic and established travel route of interest to local users as well as tourists. Wild and scenic values on about 25 miles of the Paria River would receive additional protection provided by wilderness designation and would no longer be subject to ORV use.	Both primitive and vehicle-oriented recreation would increase. Primitive recreational values would be protected on the 59,670-acre designated wilderness area but would be reduced on the areas left open to ORV use including the Paria River bottom. Wild and scenic values on about 25 miles of the Paria River would not receive additional protection provided by wilderness designation and would continue to be subject to ORV use.

PARIA-HACKBERRY WILDERNESS STUDY AREA

Appendix

Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 39 S., R. 1 W., Sec. 32	640.00		State	Nb	Exchange		\$2,000
T. 39 S., R. 2 W., Sec. 16	640.00		State	Nb	Exchange		\$2,000
T. 39 S., R. 2 W., Sec. 36	640.00		State	Nb	Exchange		\$2,000
T. 40 S., R. 1 W., Sec. 2	636.36		State	Nb	Exchange		\$2,000
T. 40 S., R. 1 W., Sec. 16, E2, N2, NW4	400.00		Federal	Nb	Exchange		\$1,250
T. 40 S., R. 1 W., Sec. 32	640.00		State	Nb	Exchange		\$2,000
T. 40 S., R. 2 W., Sec. 2	653.60		State	Nb	Exchange		\$2,000
T. 40 S., R. 2 W., Sec. 36	640.00		State	Nb	Exchange		\$2,000
T. 41 S., R. 2 W., Sec. 16	630.16		State	Nb	Exchange		\$2,000

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

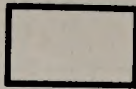


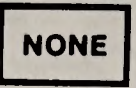
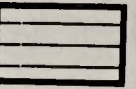
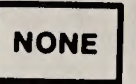
THE COCKSCOMB WSA

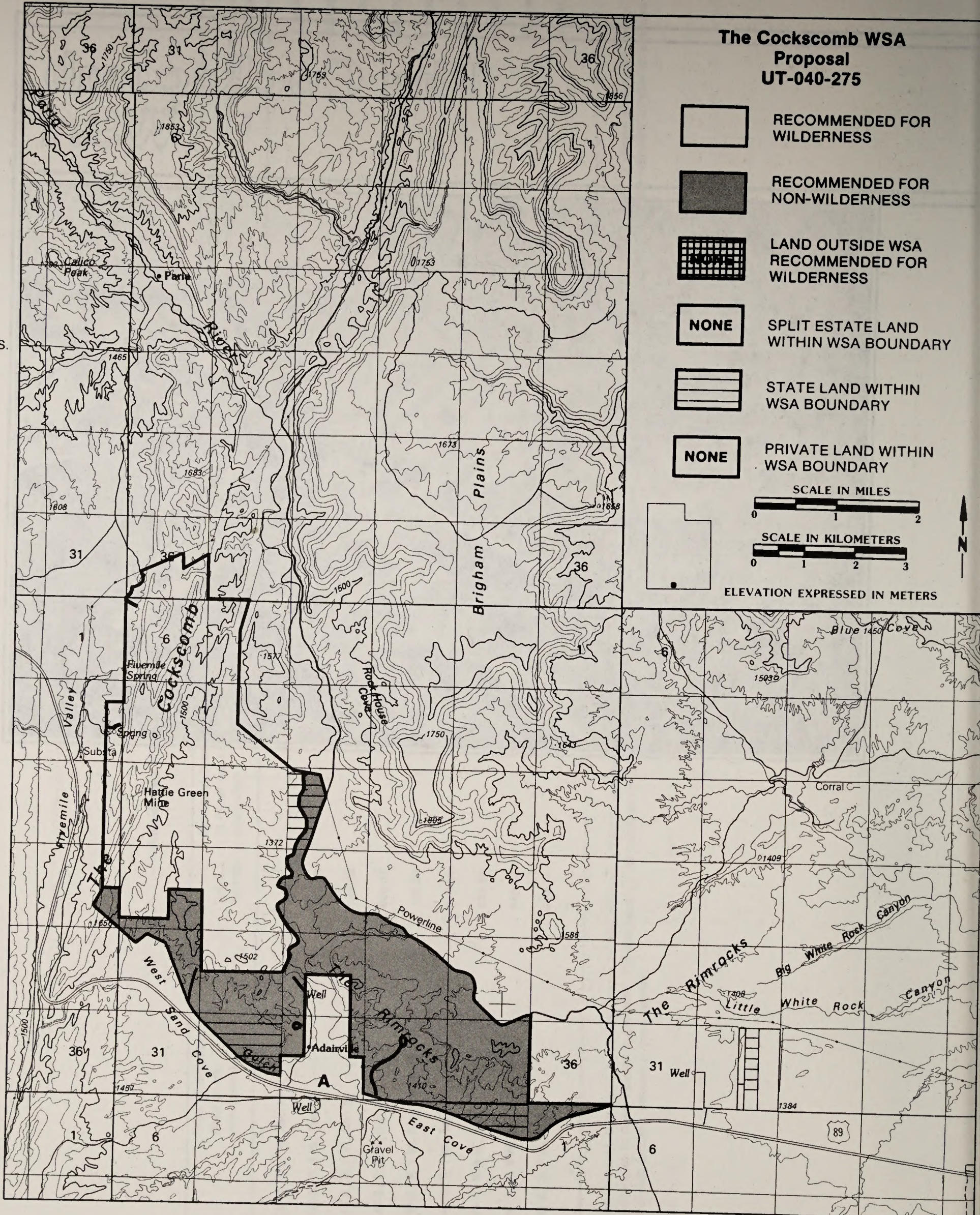
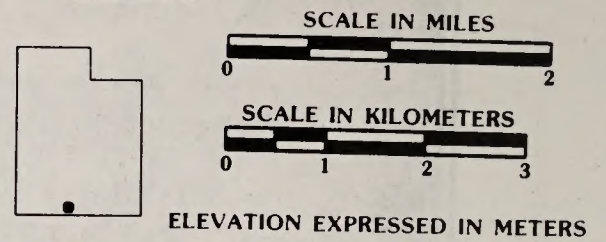
The Cockscomb WSA



THE COCKSCOMB WSA

The Cockscomb WSA Proposal UT-040-275

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



THE COCKSCOMB WILDERNESS STUDY AREA

1. THE STUDY AREA: 10,080 acres

The Cockscomb Wilderness Study Area (WSA) (UT-040-275) is in central Kane County, about 40 miles east of Kanab, Utah (population 2,148). The study area is crescent-shaped, 6 miles long from north to south and 6 miles wide, from east to west (see Map). The WSA is bounded on the south by U.S. Highway 89 and State and private land, on the west by private land, and on the north and east by State lands and a powerline right-of-way.

The Cockscomb WSA is about 5 miles directly north of the northern boundary of the Paria Canyon-Vermilion Cliffs Wilderness (BLM) in Utah and Arizona, and is south of the Paria-Hackberry/Paria-Hackberry 202 WSA (UT-040-247). The unit encompasses 10,080 acres of public land administered by the Bureau of Land Management (BLM). No State or private lands are present in the WSA. Parts of three sections of split-estate (Federal surface and State minerals), comprising 747 acres, are in the study area (see Table 1).

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	10,080
Split-Estate (BLM surface only) ^b	747
In-holdings (State, Private)	0
Total	10,827
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	5,100
BLM (outside the WSA)	0
Split-Estate (within the WSA)	200
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	5,300
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	4,980
Split-Estate	547
Total BLM land not recommended for wilderness	4,980
In-holdings (State, Private)	0

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings and/or split-estate tracts included within the portion of the WSA recommended for designation.

^b In this report, split-estate lands are defined as only those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface are classified according to the owner of the surface.

THE COCKSCOMB WILDERNESS STUDY AREA

The western edge of the WSA includes about 4.5 miles of The Cockscomb, a distinct, north-south trending ridge in south-central Utah. The Cockscomb is part of the East Kaibab monocline and is a notable local landmark because its near vertical sandstone beds form a sinuous hogsback of prominent, multicolored ridges. The eastern portion of the WSA consists of the tilted and horizontal sedimentary rocks of The Rimrocks. The intervening area includes the floodplain and terraces of the Paria River and the low hills west of the river. Three miles of the Paria River and a perennial stream flow through the WSA. Elevation within the WSA ranges from about 4,500 feet along the Paria River to more than 5,700 feet on The Cockscomb. Pinyon-juniper woodland is the dominant vegetative type on about half the study area and desert shrub is dominant on the remainder. Vegetation is sparse throughout the unit.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative where 5,100 acres would be designated as wilderness and 4,980 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 5,100 acres
(recommended for wilderness)
- 4,980 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 5,100 acres of the WSA as wilderness and to release the remaining 4,980 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The portion recommended for wilderness designation includes most of the total area with outstanding opportunities for solitude, almost half of the total area with outstanding opportunities for primitive and unconfined recreation, and all of the area with exceptional scenic quality. It would also reduce or avoid conflicts with wilderness preservation by allowing in the nondesignated portion the possibility of siting a reservoir on the Paria River and by leaving a portion of the Paria River drainage open for off-highway vehicle (OHV) recreation. In general, the more inaccessible northwest portion of the WSA would be wilderness and the more accessible southeast portion, which is bordered by roads, would be released for uses other than wilderness, including possible future coal transportation routes. Nondesignation of this portion would be commensurate with providing a vehicular use or right-of-way corridor along the Paria River in the adjacent Paria-Hackberry/Paria-Hackberry 202 WSA.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The more remote areas of the Cockscomb and the rough terrain in The Rimrocks west of the Paria River offer the best opportunities to experience the naturalness of the WSA. More than 99 percent of the WSA is in a natural condition with respect to Wilderness Act criteria. About 51 acres are substantially affected by an open pit coal prospect, two livestock reservoirs, an irrigation reservoir on the Paria River, a coal mine, and a 300-foot gap fence.

B. Solitude

In about 4,319 acres or 43 percent of the WSA, the screening from terrain features provides outstanding opportunities for solitude. Approximately 2,650 acres of the outstanding opportunities

THE COCKSCOMB WILDERNESS STUDY AREA

occupy about 52 percent of the portion recommended for wilderness designation. The terrain in The Cockscomb and The Rimrocks blocks the sight of powerlines and roads along the edge of the WSA and muffles outside sounds. The portion recommended for wilderness would include all of The Cockscomb and the western portion of The Rimrocks.

The remaining 5,761 acres, or 57 percent of the WSA, do not meet the criteria for outstanding solitude. Except in the areas with features that provide solitude, the WSA is too small and too open for visitors to avoid sights and sounds of Highway 89 and the County road on the east side of the WSA.

C. Primitive and Unconfined Recreation

Opportunities for hiking, photography, and sightseeing are outstanding on about 5,600 acres (56 percent of the WSA), almost entirely in The Cockscomb and The Rimrocks portions of the WSA. No hiking trails are in the study area, but hiking is not difficult and the WSA can be hiked in 1 day. Approximately 2,750 acres with outstanding opportunities for primitive and unconfined recreation occupy about 54 percent of the portion recommended for designation.

The remainder of the WSA, 4,480 acres, does not have outstanding primitive recreational opportunities.

D. Special Features

More than 2,000 acres and about 41 percent of the area being recommended possess scenic special features. No threatened or endangered plant species are known to occur in the WSA. Six U.S. Fish and Wildlife Service (FWS) candidate threatened or endangered plant species that may grow in the study area are the Psoralea epipsila, Psoralea pariensis, Penstemon ammophilum, Lesquerella tumulosa, Xylorhiza cronquistii, and Astragalus ampullarius.

The endangered bald eagle and peregrine falcon have been reported in the WSA. Both species are present along Lake Powell, 20 miles east of the WSA, and can be expected to migrate through the study area. FWS candidate animal species, which may be present in the study

area include the ferruginous hawk, Swainson's hawk, southern spotted owl, long-billed curlew, Arizona Bell's vireo, western snowy plover, white-faced ibis, and Great Basin Silverspot butterfly.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would add a potential natural vegetation (PNV) ecosystem not presently represented in the NWPS. PNV is the vegetation that would develop over time if an area remains free of disturbance by human interference. The WSA is in the Colorado Plateau Province/Ecoregion, and the PNV would be entirely saltbush-greasewood (10,080 acres).

The PNV of the WSA is represented in the NWPS and in BLM study areas in Utah. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada.

Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of this population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The Cockscomb WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 64 wilderness areas comprising 2,834,115 acres in Utah and Arizona.

Twelve designated wilderness areas are within 100 miles of the WSA.

THE COCKSCOMB WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Saltbush-Greasewood	1	20,000	17	383,923
UTAH (COLORADO PLATEAU PROVINCE)				
Saltbush-Greasewood	1	20,000	17	383,923

Source: BLM File Data.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	54	2,166,418

Source: BLM File Data.

In a clockwise direction beginning to the northeast, are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS), the 40,600-acre Saddle Mountain Wilderness (FS), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 37,300-acre Grand Wash Cliffs wilderness (BLM), the 7,000-acre Ashdown Gorge Wilderness (FS), and the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Both the designated portion and the non-designated portion could be managed as wilderness. To do so in the non-designated portion, however, would require prohibiting or constraining other uses related to water rights or to pub-

lic benefit, such as vehicular recreation and rights of way, which would conflict with wilderness preservation.

With designation, the 5,100 acres would be withdrawn from mineral location. Some detraction from solitude would result from construction and use of a coal transportation corridor and a dam and reservoir in the nondesignated portion. Special management would be required to mitigate the visual, noise, and air quality disturbances that would result during construction.

There are 340 acres of post-FLPMA oil and gas leases in the portion of the WSA recommended as wilderness, but these leases are subject to the nonimpairment stipulation and likely will expire and not be renewed. There are 100 acres of mining claims in the recommended area and 300 acres of mining claims in the area not recommended for wilderness designation. However, the potential for significant amounts of locatable minerals is low, and development is not expected in the foreseeable future.

THE COCKSCOMB WILDERNESS STUDY AREA

The 747 acres of split-estate land in the WSA is along the southern boundary of the area. Therefore, provision of access to these sections would not create wilderness management problems.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) assessed the mineral resource potential of 5,100 acres of the portion of the WSA recommended for wilderness, and prepared a mineral assessment report (USGS Bulletin 1748-A, Henry Bell III, et al., 1990). The report indicates that no identified resources of metallic or nonmetallic minerals occur, but about 1.8 million tons of identified subbituminous coal resources are estimated in the WSA. The mineral resource potential for all metals, including gold and uranium, is low. Gravel deposits have been mined nearby, and the mineral resource potential is high for additional deposits of sand and gravel in the southern end of the WSA. A moderate energy resource potential exists for coal. The resource potential is moderate for oil and gas, and is low for geothermal energy.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 37 inputs specifically addressing this WSA were received from 42 commenters, including oral statements received at 17 public hearings on

the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 24 commenters supported wilderness designation for part or all of the WSA, while 12 commenters were opposed. Six commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the special features in the WSA. The majority of those commenting in favor of wilderness were from outside the state.

Those opposing wilderness were concerned that wilderness would restrict public access to the benefit of special groups, interfere with water control and uses, and the WSA would not be manageable as wilderness. The majority of those commenting were from rural Utah.

One Federal agency, the USBM commented on the Draft EIS. The USBM noted that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. These findings have been incorporated into the Final EIS and study report.

No comment letters were received on the Final EIS.

There are no State lands in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the WSA is considered to have high wilderness values that are a natural continuation of the values found in the adjacent Paria-Hackberry/Paria-Hackberry 202 WSA (UT-040-247/UT-040-247A). The State commented that it appears that the moderate conflicts would have a low impact under a partial wilderness designation. The State suggested that manageability of the entire WSA as wilderness might be a problem.

THE COCKSCOMB WILDERNESS STUDY AREA

The Kane County Commission is opposed to wilderness designation of The Cockscomb WSA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. In commenting on the Draft EIS, the County noted that the Cockscomb area is surrounded by numerous activities and land uses which make effective wilderness management difficult. The conflicts include Highway 89, Cottonwood Canyon Road, power transmission lines, and mining areas. In their opinion, the BLM proposed action is barely large enough to meet wilderness criteria, but does not exclude all of the conflicts. The County is concerned that designation of this WSA would interfere with possible coal transportation corridors which are essential to the development of coal in Kane County.

THE COCKSCOMB WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives	
Issue Topic	All Wilderness (10,080 Acres)
	<p>Recommendation Partial Wilderness (5,100 Acres)</p>
Impacts on Wilderness Values	<p>Wilderness values would not be protected by wilderness designation. No disturbance is projected that would affect wilderness values in the foreseeable future. Continued vehicular use of the Paria riverbed would detract from opportunities for solitude and primitive recreation. Except for the Paria riverbed, special features would not be significantly affected.</p>
Impacts on Recreation	<p>Primitive recreational opportunities would be preserved in the designated area. Other impacts would be the same as for the No Action/No Wilderness Alternative.</p>
	<p>No Action/No Wilderness</p>
	<p>Wilderness values would be preserved by wilderness designation.</p>
	<p>Primitive recreational opportunities would be preserved and enhanced. Motorized use of the Paria riverbed would be precluded. Overall, visitation would decline initially. Designation would provide additional protection of 3 miles of the Paria River, a segment of the wild and scenic river inventory.</p>

THE COCKSCOMB WILDERNESS STUDY AREA

Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 42 S., R. 1 W., Sec. 16	200.00		Federal	No	Exchange		\$ 650

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

South-West Region Part B

Wahweap WSA

Burning Hills WSA

Death Ridge WSA

Phipps-Death Hollow ISA Complex

Steep Creek WSA

North Escalante Canyons/The Gulch ISA Complex

Carcass Canyon WSA

Scorplon WSA

Escalante Canyons Tract 5 ISA Complex

Fifty Mile Mountain WSA

Red Butte WSA

Spring Creek Canyon WSA

The Watchman WSA

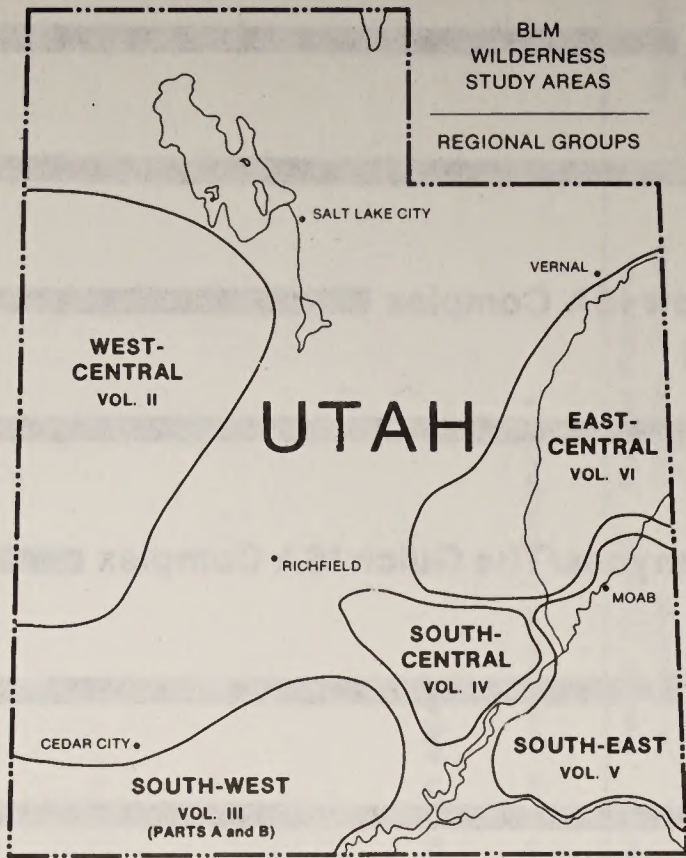
Taylor Creek Canyon WSA

Goose Creek Canyon WSA

Beartrap Canyon WSA

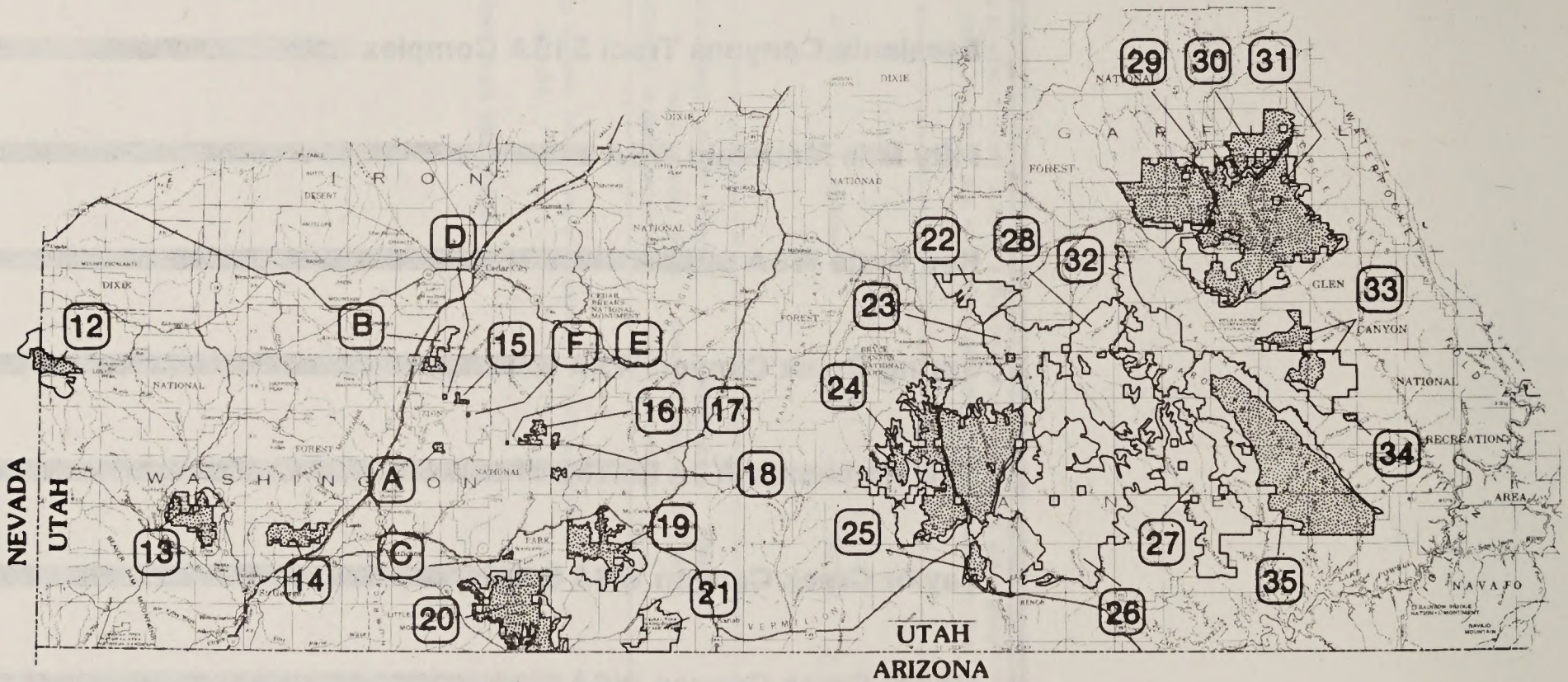
SOUTH-WEST REGION

LOCATION MAP



MAP REFERENCE NUMBER/STUDY AREA

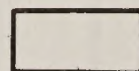
- 12 Cougar Canyon WSA
- 13 Red Mountain / Red Mountain 202 WSA
- 14 Cottonwood Canyon WSA
- 15 LaVerkin Creek Canyon WSA
- 16 Deep Creek WSA
- 17 North Fork Virgin WSA
- 18 Orderville Canyon WSA
- 19 Parunuweap Canyon WSA
- 20 Canaan Mountain WSA
- 21 Moquith Mountain WSA
- 22 The Blues WSA
- 23 Mud Spring Canyon WSA
- 24 Paria-Hackberry / Paria-Hackberry 202 WSA
- 25 The Cockscomb WSA
- 26 Wahweap WSA
- 27 Burning Hills WSA
- 28 Death Ridge WSA
- 29 Phipps-Death Hollow ISA Complex
- 30 Steep Creek WSA
- 31 North Escalante Canyons / The Gulch ISA Complex
- 32 Carcass Canyon WSA
- 33 Scorpion WSA
- 34 Escalante Canyons Tract 5 ISA Complex
- 35 Fifty Mile Mountain WSA
- A Red Butte WSA
- B Spring Creek Canyon WSA
- C The Watchman WSA
- D Taylor Creek Canyon WSA
- E Goose Creek Canyon WSA
- F Beartrap Canyon WSA



BLM RECOMMENDATION



BLM WSAs or portions of WSAs that would be designated wilderness



BLM WSAs or portions of WSAs that would NOT be designated wilderness



BLM WSAs under study by adjacent state

Wahweap
WSA



R. 1 W.

R. 1 E.

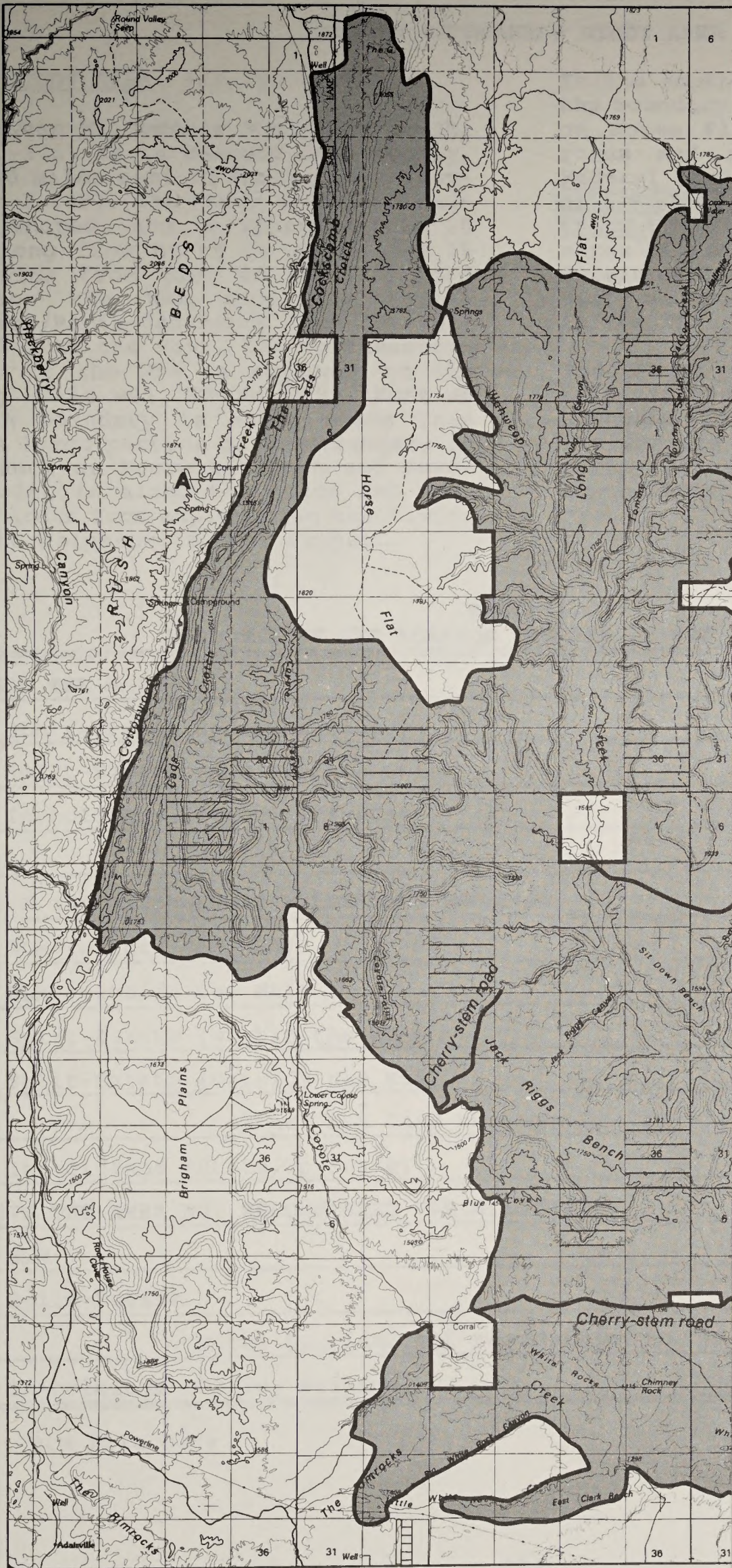
WA

T. 39 S.

T. 40 S.

T. 41 S.

T. 42 S.



R. 1 W.

R. 1 E.

WAHWEAP WSA

R. 2 E.

T. 39 S.

T. 40 S.

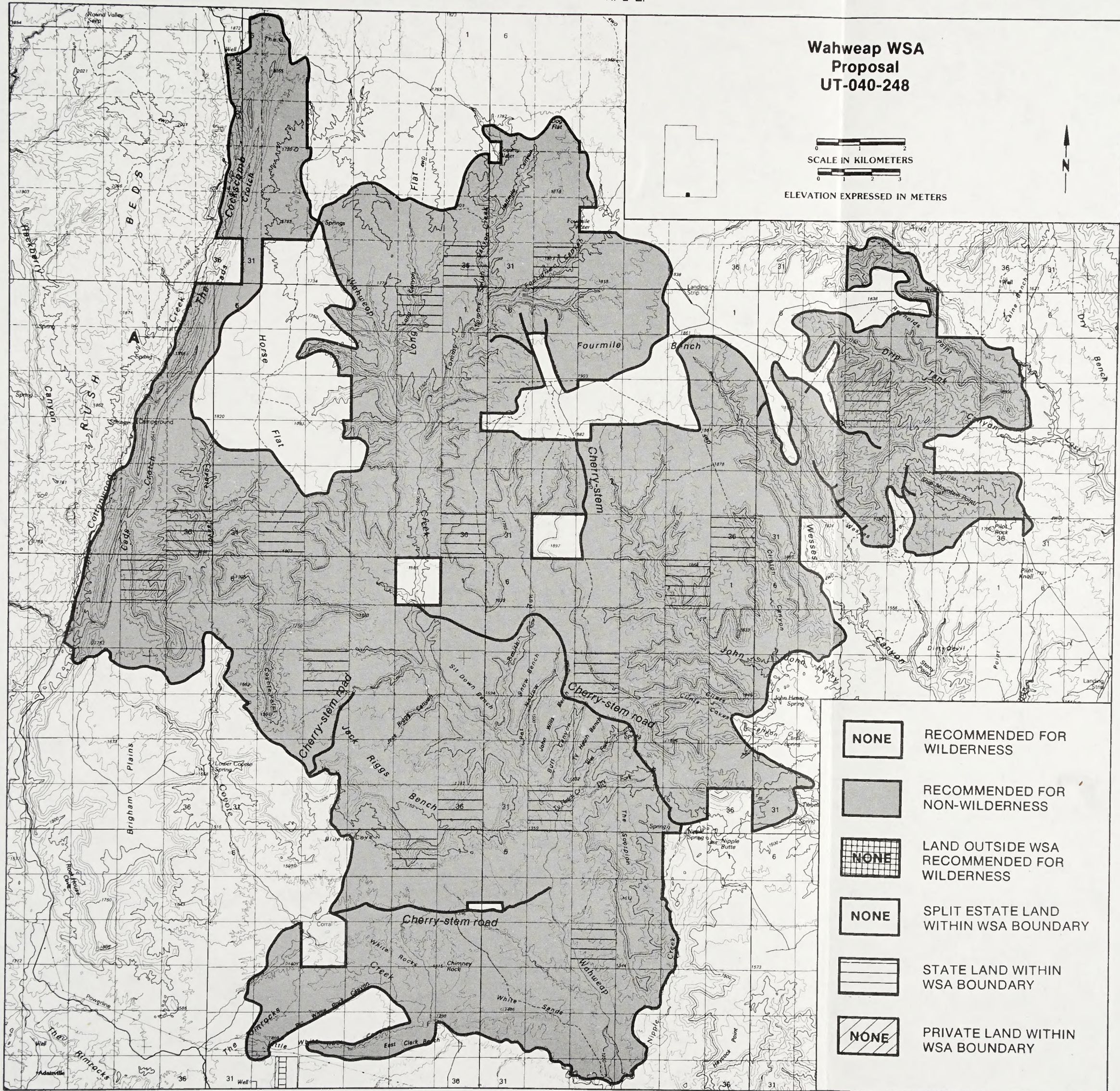
T. 41 S.

T. 42 S.

Wahweap WSA Proposal UT-040-248

SCALE IN KILOMETERS

ELEVATION EXPRESSED IN METERS



- NONE RECOMMENDED FOR WILDERNESS
- RECOMMENDED FOR NON-WILDERNESS
- LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
- NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
- STATE LAND WITHIN WSA BOUNDARY
- NONE PRIVATE LAND WITHIN WSA BOUNDARY

WAHWEAP WILDERNESS STUDY AREA

1. THE STUDY AREA: 134,400 acres

The Wahweap Wilderness Study Area (WSA) (UT-040-248) is in eastern Kane County, about 40 miles east of Kanab, Utah (population 2,148). The study area is irregularly shaped, and is approximately 20 miles long from north to south and 15 miles wide from east to west. A road separates the WSA from the Paria-Hackberry/Paria-Hackberry 202 WSA (UT-040-247), to the west. The northeastern portion of the WSA is adjacent to the Burning Hills WSA (UT-040-079). Most of the WSA boundary is along roads (see Map). A large portion of the boundary in areas such as Fourmile Bench and Reynolds Point is along the roads and disturbed areas from exploration associated with the Kaiparowits Coal Project.

In the northwestern portion of the WSA, the boundary avoids a large chained area on Horse Flat. Several cherry-stemmed roads and exclusions containing non-Federal lands and public lands with few or no wilderness characteristics penetrate the WSA. The WSA contains 134,400 acres of public land administered by the Bureau of Land Management (BLM). Sixteen State sections (10,361 acres) are inheld in the WSA (see Table 1).

The WSA is part of the Kaiparowits Plateau, in the Canyonlands Section of the Colorado Plateau Physiographic Province. The surface of the WSA slopes generally northward, and consists of benches and south-facing cliffs.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	134,400
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	10,361
Total	144,761
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	134,400
Split-Estate	0
Total BLM land not recommended for wilderness	134,400
In-holdings (State, Private)	10,361

Source: BLM File Data

WAHWEAP WILDERNESS STUDY AREA

The study area is like a giant staircase, which rises from an elevation of 4,040 feet on Wahweap Creek at the southern edge of the WSA, to more than 6,500 feet along high points on The Cockscomb, at the northwestern edge of the WSA. There are no perennial streams in the WSA. Vegetation is predominantly pinyon-juniper and desert shrubs, but there are small areas of sagebrush and grass.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a no wilderness (no action) alternative which is the recommendation in this report, an all wilderness alternative, and a partial wilderness alternative of 70,380 acres.

2. RECOMMENDATION AND RATIONALE:

0 acres
(recommended for wilderness)
134,400 acres
(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

All of the study area is in a natural state, but only about 10 percent of the WSA has outstanding opportunities for solitude. About 17 percent of the WSA has high scenic values, in six scattered locations. Opportunities for primitive recreation are not outstanding. About 1,000 acres of comparatively old pinyon and juniper trees and 11,700 acres of features with geologic interest that are found in the WSA are not considered to be of national or regional significance.

In contrast with the relatively low wilderness values, the WSA has comparatively high potential for oil and gas development in the long-term future. The WSA

is in the southern part of the Kaiparowits Coal Field and within the Kaiparowits Known Recoverable Coal Resource Area. About 12 percent of the WSA is currently leased for coal, with pre-existing rights. Extraction of coal from the Kaiparowits Coal Field is not expected in the short term, but the most likely location for mining would be on the existing leases, which may include those in the Wahweap WSA.

Because of the WSA's large size, BLM reviewed several partial wilderness alternatives that could preserve those portions of the WSA with the greatest wilderness attributes and avoid conflicts with other uses. None of these were found to be suitable for wilderness management. The recommendation for no wilderness designation in the Wahweap WSA is based on overall low wilderness qualities and long-term future potential for energy mineral extraction.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. More than 99 percent of the WSA meets the criteria for naturalness. Imprints of human activity evident in the WSA are approximately 40 miles of ways, including ways created during exploration for coal on and below Reynolds Point, Fourmile Bench, and John Henry Bench; short fences in Wahweap and Tommy Smith Creeks; impoundments on Jack Riggs Bench and near Chimney Rock; and ways and fences in Coyote Creek. These imprints combined involve less than 1 percent (46 acres) of the total WSA area. However, the naturalness attributes of the WSA are tempered by the wide distribution of these imprints of man. There are no large blocks of land totally devoid of human disturbance.

Since BLM defined the WSA, approximately 1 acre of the area has been disturbed. This disturbance resulted from (1) non-mechanical, nonimpairing construction of

WAHWEAP WILDERNESS STUDY AREA

a 500-foot livestock gap fence on Jack Riggs Bench in 1984; (2) nonmechanical, nonimpairing redevelopment of a spring also on Jack Riggs Bench in 1984; and (3) an unauthorized alabaster mining operation on the west side of The Gut, just inside the WSA, in 1985. The required reclamation was completed in 1988. Success of reclamation of the mining will result in nonimpairment and the entire WSA meets the Wilderness Act criteria for naturalness.

B. Solitude

In all, about 10 percent (13,440 acres) of the WSA meets the outstanding opportunities for solitude criterion for areas under wilderness review. Benches, such as Fourmile Bench, Jack Riggs Bench, and Horse Flat, do not provide opportunities for solitude because they lack adequate screening. The WSA is not compact in configuration, and numerous cherry-stemmed intrusions penetrate the unit and lessen the opportunities for solitude. Approximately 120,960 acres do not meet the standard for outstanding opportunities for solitude.

The dendritic upper reaches of drainages such as Wahweap and Coyote Creeks, John Henry Canyon, Drip Tank Canyon, and Wesses Canyon provide screening. In the lower benches and canyons in the southern portion of the WSA, hoodoos, balanced rocks, and the sheer walls of the canyons also provide screening. Coves are eroded into a group of narrow canyons in this area.

C. Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation are not outstanding within the WSA. The unit does not contain features or conditions that would provide excellent opportunities for recreation activities or for a single activity with outstanding quality.

D. Special Features

The Fourmile Bench Old Tree Area is a unique area of 1,400-year old pinyon and juniper trees. Prior to identification of the area as a WSA, it was generally thought that the area's trees did not exceed 600 to 800 years of age. Protection for further scientific study has

been considered for the area. The scientific values extend over approximately 1,000 acres of the WSA.

Some specific locations in the WSA provide exceptional scenic geologic features. The lower portions of Wahweap Creek and Coyote Creek have exposed the Dakota Sandstone Formation. The sandstone is most evident in the Coyote Creek drainage in the White Rocks and the Rimrocks. Big White Rock Canyon, Little White Rock Canyon, Chimney Rock Canyon, and Chimney Rock are scenic features. The red Entrada Formation is also exposed in this area and lends visual contrast to the white Dakota Formation. Within this area are sheer-walled canyons, hoodoos, balanced rocks, and coves with narrow canyons. BLM has identified approximately 7,007 acres of scenic features in this portion of the WSA.

The East Kaibab monocline, or The Cockscomb, extends along the western boundary of the WSA. The monocline contains a feature known as Cads Crotch which is a trough on the crest of the structure. Approximately 4,728 acres of scenic features are present in the Cads Crotch portion of the monocline.

The upper portions of the Coyote Creek drainage, the inner canyon of the middle segment of the Wahweap Creek drainage including the West Fork of Ty Hatch Canyon, and the upper reaches of the Wahweap drainage are also scenic. The upper portion of the Wahweap system includes Tommy Smith Creek, Fourmile, Tommy, Wahweap, and Long Canyons. In contrast to the Warm Creek drainage canyons in the WSA, the Wahweap Creek drainage canyons exhibit some riparian vegetation such as cottonwood groves. The vegetation contributes to the landscape qualities of the canyon systems. Scenic features in these portions of the WSA are found in approximately 10,546 acres.

Peregrine falcons and bald eagles, listed as endangered, may occasionally visit the WSA. Cougar, which is a wildlife species associated with wilderness, is found in the WSA. Nine other animal species and six plant species that are considered sensitive may inhabit the WSA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife

WAHWEAP WILDERNESS STUDY AREA

Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is juniper-pinyon woodland (100,000 acres) and saltbush-greasewood (34,400 acres). The PNV in the WSA is represented in the NWPS nationally and in Utah and in other BLM study areas both in and outside of Utah. This information is summarized in Table 2 from data compiled in December 1989.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,044,005
Saltbush-Greasewood	1	20,000	17	359,603
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,606,198
Saltbush-Greasewood	1	20,000	17	359,603

Source: BLM File Data.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is not within a 5-hour drive of any major population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Wahweap WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January 1987, the NWPS included 64 areas comprising 2,834,115 acres in Utah and Arizona.

Eight designated wilderness areas are within 100 miles of the WSA. In a clock-

wise direction beginning to the north, are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 45,000-acre Dark Canyon Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), and the 7,000-acre Ashdown Gorge Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

BLM believes that the study area could be managed as wilderness in the short-term future. There are 1,225 acres of post-FLPMA oil and gas leases in the

WAHWEAP WILDERNESS STUDY AREA

WSA, but these leases are subject to nonimpairment of wilderness values and will likely expire and not be renewed if the area is designated as wilderness. There are 640 acres of mining claims, but the probability of development of locatable minerals also is low. There are 12 coal leases covering 17,628 acres of the WSA. These leases could be legally developed following wilderness designation, rendering the northeast portion of the WSA unmanageable as wilderness. However, these leases may expire before diligence requirements are met, and would not be renewed if the area is designated as wilderness. In addition to the influence of existing cherry-stemmed roads, the presence of 16 sections of in-held State lands distributed throughout the WSA further complicates the question of manageability. Of the 10,361 acres of State land in the WSA, 9,037 are under leases for oil, gas, hydrocarbons, and grazing.

Although grazing is the only activity occurring on these lands at present, the known coal values of the region along with some potential for oil and gas may lead to proposals that would require provision of many additional access roads through the wilderness in the long-term future.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) assessed the mineral resource potential of 70,380 acres in the WSA, and prepared a mineral assessment report (USGS Bulletin 1748-A, Henry Bell III, et al., 1990). The report indicates that no identified resources of metallic or nonmetallic minerals occur, but about 350,000 tons of identified subbituminous coal resources are estimated to be in the WSA. The mineral resource potential for all metals, including gold and uranium, is low. Gravel deposits have been mined nearby, and the mineral resource potential is high for additional deposits of sand and gravel in the southern end of the WSA. A moderate energy resource potential exists for coal. The resource potential is moderate for oil and gas, and is low for geothermal energy.

Impacts on Resources

The comparative impact table (Table 3) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

No loss of local employment or income would occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development of coal in the long term. There would be major beneficial and adverse affects in Kane County.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 115 inputs specifically addressing this WSA were received from 146 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 104 commenters supported wilderness designation for part or all of the WSA, while 35 commenters were opposed. Seven commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on special features in the WSA and unspecified wilderness values. The majority of those commenting in favor of wilderness were from outside of Utah. Of particular concern was the need to protect wilderness values.

WAHWEAP WILDERNESS STUDY AREA

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development. The majority of those opposed were from rural Utah, but a significant proportion were from other states.

Two Federal agencies, the National Park Service (NPS) and the USBM commented on the Draft EIS. The NPS did not take a position regarding designation or non-designation, but did recommend that the EIS identify The Jewel Box along The Cockscomb as a proposed National Natural Landmark (NNL). The USBM commented that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. These findings have been incorporated into the EIS and study report.

No comment letters were received on the Final EIS.

There are 16 sections (10,361 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of this WSA. The State considers the WSA to have moderate wilderness values and conflicts. In its evaluation of the partial wilderness alternative, the State suggested that further boundary adjustments to exclude all mesa tops and the upper reaches of Fourmile Canyon would mitigate much of the livestock and coal resource conflicts. The State suggested that the juniper tree area on Fourmile Bench be designated as a Research Natural Area (RNA) and noted that the bottom of Cottonwood Creek must be reserved for the alignment of an improved highway between US Highway 89 and Cannonville.

The Kane County Commission is opposed to wilderness designation of the Wahweap WSA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. In commenting on the Draft EIS the County noted that the Wahweap WSA is located on a very important, known coal

resource and that it would be unwise to create a conflict with such a known resource. The County also stated that the area should be open to improvement of livestock grazing. In their opinion the area lacks outstanding opportunities for solitude and primitive recreation. The County believes that scientific and scenic areas in the WSA can be protected under current BLM directives.

WAHWEAP WSA

Table 3
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives	
	Recommendation No Action/No Wilderness	All Wilderness (134,400 Acres)
Impacts on Wilderness Values	<p>Wilderness values would not be protected by wilderness designation, and loss would occur as intrusions increase. In the short term, naturalness and opportunities for solitude and primitive recreation would be directly lost on 7,191 acres of the WSA because of vegetation treatments, rangeland projects, wildlife water projects, and development of access roads to State in-holdings and indirectly reduced in quality on up to an additional 33,600 acres. Special features would not be significantly affected. Vehicular use of 40 miles of existing ways and future roads would occasionally detract from opportunities for solitude and primitive recreation in the WSA. In the long term, coal development would directly eliminate wilderness values on 40 acres of the WSA, and would indirectly reduce wilderness values on up to 13,440 acres.</p>	<p>Wilderness designation would preserve overall the wilderness values in the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 46 acres of the WSA because of rangeland projects, wildlife water projects, and development of access roads to State in-holdings. Special features, including Class A scenery and other scenic features, geologic features, special status species, wildlife associated with wilderness and special vegetation areas would be preserved overall.</p>
		<p>Partial Wilderness (70,380 Acres)</p> <p>Wilderness values would be preserved overall in the designated portion which is approximately 52 percent of the WSA. In the short term, naturalness and opportunities for solitude and primitive recreation would be directly lost on 3,049 acres because of vegetation treatments, rangeland projects, wildlife water projects, and development of access roads to State in-holdings, and would be indirectly reduced in quality on up to 16,128 acres. Most of the impact would be in the non-designated area. Special features would be preserved overall in the designated area. Although 25 percent of the scenic values and the old pin-yon-juniper woodland stand on Four Mile Bench would be in the non-designated area, these values would most likely not be disturbed. Use of 30 miles of vehicular ways in the non-designated portion would detract from opportunities for solitude and primitive recreation in the WSA. Coal development over the long term would directly disturb 40 acres of the WSA, and an indirect reduction in the quality of wilderness values would occur on up to 13,440 acres of the WSA.</p>

WAHWEAP WSA

**Table 3 (Continued)
Comparative Summary of Impacts by Alternative**

Issue Topic	Alternatives		
	Recommendation No Action/No Wilderness	All Wilderness (134,400 Acres)	Partial Wilderness (70,380 Acres)
Impacts on Vegetation	Special status plant species would not be significantly affected. The 7,191 acres of projected surface disturbance would alter only about 7.3 percent of the pinyon-juniper woodland in the WSA; therefore, there would not be significant changes in the vegetation types in the WSA.	Implementation of the All Wilderness Alternative would not significantly affect the vegetation resource in the WSA. Vegetation types and special status plant species would be protected because potential disturbance would be reduced to 46 acres.	Special status plant species would not be significantly affected. The 3,089 acres of projected surface disturbance would affect less than 3 percent of the vegetation in the WSA.
Impacts on Mineral and Energy Exploration and Development	There would be no adverse impacts on mineral and energy development with this alternative because minerals could be leased, claimed, and developed as at present.	Wilderness designation would preclude exploration and development of about 500 million tons of recoverable coal. Loss of exploration and development opportunities for other mineral and energy resources would not be significant, because the probability of development is low even if the WSA is not designated wilderness.	Implementation of the Partial Wilderness Alternative would not prevent the recovery of significant amounts of leasable or locatable or salable minerals. The majority of the significant coal resource would be located in the nondesignated portion of the WSA and could eventually be developed.
Impacts on Wildlife Habitat and Populations	Wildlife habitat and populations including special status animal species would not be significantly affected. Overall, implementation of the water and vegetation treatment projects would benefit wildlife by providing additional water, forage, and ecotones. Overall, less than 6 percent of the wildlife habitat in the WSA would be disturbed.	Wilderness designation would preclude 7,100 acres of vegetation treatments and resulting habitat improvement would be foregone. All species would benefit from additional opportunities for solitude. Less than 1 percent of the wildlife habitat in the WSA would be disturbed.	Partial wilderness designation would preclude 4,100 acres of vegetation treatments and resulting habitat improvement would be foregone. All species would be provided with additional opportunities for solitude on 52 percent of the WSA. Less than 3 percent of the wildlife habitat in the WSA would be disturbed.

WAHWEAP WSA

Table 3 Continued)
Comparative Summary of Impacts by Alternative

		Alternatives	
Issue Topic	Recommendation No Action/No Wilderness	All Wilderness (134,400 Acres)	Partial Wilderness (70,380 Acres)
Impacts on Livestock Management	Present livestock management practices would continue. Permittees would benefit from 7,100 acres of vegetation treatments, which could provide an increase of 1,160 AUMs and improve livestock distribution.	Restrictions on motorized use of 40 miles of way would increase management costs and inconvenience to 42 permittees. The opportunity for an increase of 1,160 AUMs and better livestock distribution through vegetation treatments and construction of four reservoirs would be foregone.	Implementation of this alternative would not result in a change in the level of livestock use but would cause a minor change in livestock supervision and management in the designated portion of the WSA. Restrictions on access to 10 miles of the 40 miles of ways in the WSA would cause slight inconvenience and increases in management costs to livestock permittees. The opportunity for an increase of 669 AUMs and better livestock distribution through vegetation treatments would be foregone.
	No loss of local employment or income would occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development of coal in the long term. There would be major beneficial and adverse affects in Kane county.	Wilderness designation would not significantly affect present local or regional economic conditions. However, new leasing in the WSA would not be allowed; therefore, potential sales and revenues from leasable minerals (coal) would be foregone. Over the long term, coal development and associated beneficial and adverse economic impacts would not occur. This would significantly change future economic conditions in Kane County from what they would be without wilderness designation.	Over the short term, the Partial Wilderness Alternative would not affect local economic conditions. Impacts could occur in the long term as a result of projected coal development in the non-designated portion of the WSA. There would be major beneficial and adverse effects in Kane County.

Burning Hills WSA

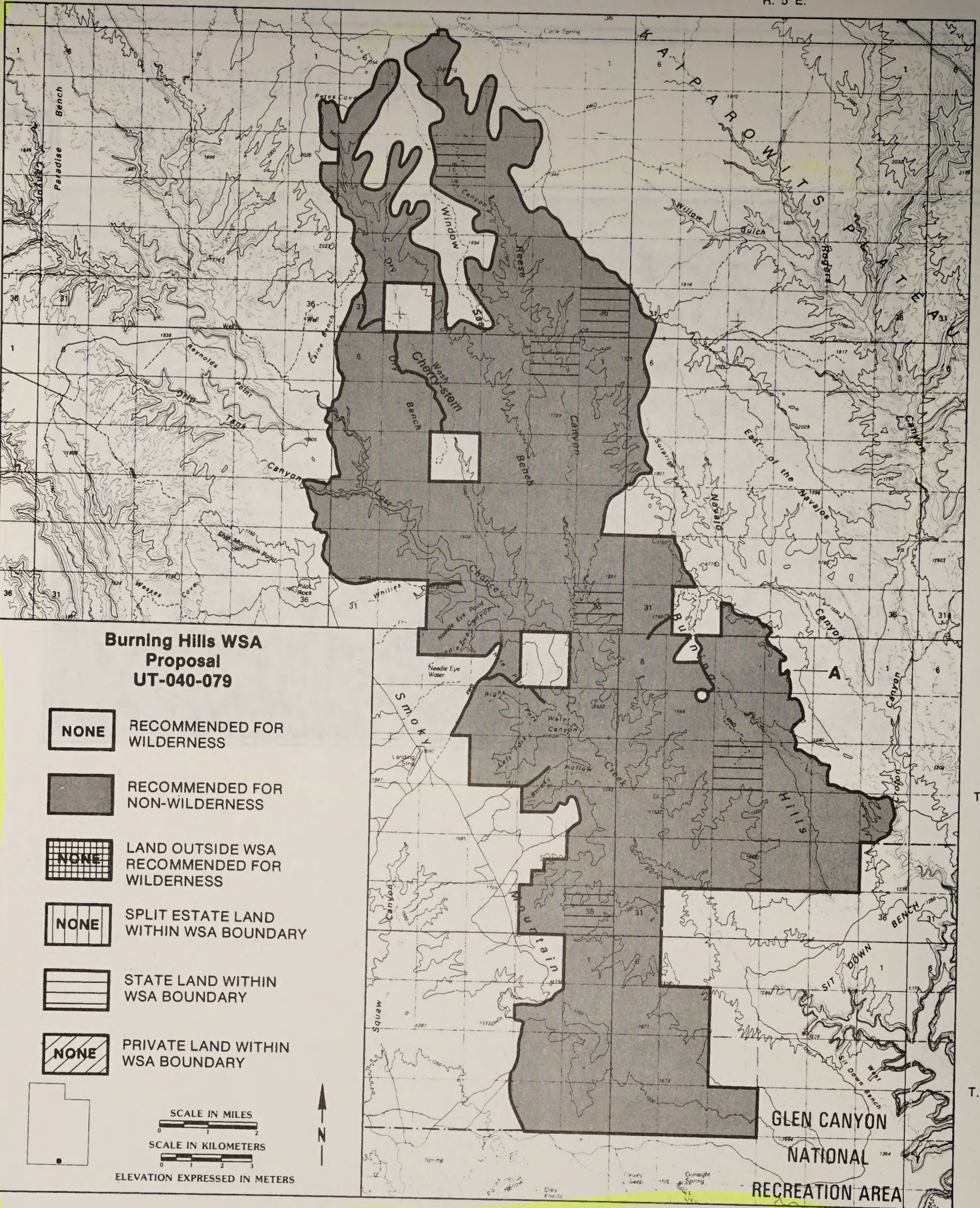


BURNING HILLS WSA

R. 3 E.

R. 4 E.

R. 5 E.



T. 39

T. 40

T. 41 S

T. 42 S

BURNING HILLS WILDERNESS STUDY AREA

1. THE STUDY AREA: 61,550 acres

The Burning Hills Wilderness Study Area (WSA) (UT-040-079) is in eastern Kane County, about 60 miles east of Kanab, Utah (population 2,148). The study area is an elongated, irregularly shaped unit about 4 miles from north to south and 2.25 miles wide, from east to west (see Map). The WSA is separated by roads from the Wahweap WSA (UT-040-248) on the west and the Fiftymile Mountain WSA (UT-040-080) on the east. The northern boundary of the WSA is also defined by roads (see Map). The Glen Canyon National Recreation Area (GCNRA) is adjacent to the WSA on the south. There are 61,550 acres of public land administered by the Bureau of Land Management (BLM) in the WSA. Six sections of State land (3,840 acres) are in the WSA (see Table 1).

The WSA is part of the Kaiparowits Plateau in the Canyonlands Section of the Colorado Plateau Physiographic Province. The study area is a plateau remnant deeply incised by canyons. The highest areas in the WSA are knolls that have been reddened by natural coal fires. Elevations in the WSA range from less than 4,100 feet to more than 6,300 feet. Desert shrub is the dominant vegetation.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative, which is the recommendation in this report, and an all wilderness alternative.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	61,550
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	3,840
Total	62,390
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	61,550
Split-Estate	0
Total BLM land not recommended for wilderness	61,550
In-holdings (State, Private)	3,840

Source: BLM File Data

BURNING HILLS WILDERNESS STUDY AREA

2. RECOMMENDATION AND RATIONALE:

0 acres

(recommended for wilderness)

61,550 acres

(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

All of the study area is in a natural state. Less than half of the WSA has outstanding opportunities for solitude and portions have scenic values, but nowhere are the opportunities for primitive recreation considered to be outstanding.

The WSA is within the Kaiparowits Coal Field and about 21 percent of the study area is leased for coal, with pre-existing rights. Extraction of coal in the Kaiparowits Coal Field is not expected in the short-term, but any future development would most likely occur on existing leases, including those in the Burning Hills area. The long-term future potential for coal mining in the WSA is given precedence over the wilderness values.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Although the WSA is in an essentially natural condition, some imprints of human activity can be found in the unit. These imprints include drill pads and access ways on Dry Bench and in the upper Reese Canyon drainage; a cabin in Drip Tank Canyon, ways in Reese Canyon below Surprise

Valley; an abandoned stock tank and other grazing-related items in Reese Canyon; a trailer and old corral in Last Chance Creek at the mouth of Reese Canyon, and ways in the Burning Hills west of Navajo Canyon. These artifacts and impressions are substantially unnoticeable in the area as a whole and total less than 610 acres.

The natural quality of the WSA has not changed since 1980. No additional imprints have occurred in the WSA as a result of impairing uses or activities allowed under the BLM's Interim Management Policy (IMP).

B. Solitude

Overall, about 45 percent (27,700 acres) of the WSA meets the solitude criterion for areas under wilderness review. The size and configuration of the WSA, in combination with topographic and vegetation screening, provide outstanding opportunities for solitude in this area.

Outstanding opportunities for solitude occur in Dry Wash Canyon, Last Chance Creek Canyon, and the extreme upper portion of Reese Canyon because of the combination of terrain and screening by riparian vegetation. Outstanding opportunities for solitude also can be found between the canyons, on Window Sash Bench and Dry Bench, due to the size of the benches and the extensive pinyon-juniper woodland forest which grows on them.

A system of canyons with no intervening benches, south of Smoky Hollow, forms an escarpment which concentrates and enhances the topographic screening and makes the opportunity outstanding for solitude.

Areas within the WSA that lack both vegetation and topographic screening are not considered to have outstanding opportunities for solitude. Such areas are commonly found on outward-facing slopes that have a desert shrub vegetation cover.

C. Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation are not outstanding within the WSA.

BURNING HILLS WILDERNESS STUDY AREA

D. Special Features

The Burning Hills portion of the WSA illustrates the geological changes over the ages that have resulted from naturally occurring coal fires. Approximately 13,000 acres of the Burning Hills are within the WSA. The Burning Hills portion of the WSA is also a scenic area. Red colorations in the landscape are the result of geological changes attributed to coal burning underground. Scenic values are also present in the lower Last Chance Creek Canyon area below Smoky Mountain. The escarpment at the tip of Smoky Mountain exhibits the same colorations as the Burning Hills. This landscape includes badlands areas at the foot of the cliffs on the GCNRA boundary. These scenic features cover a total area of about 27,500 acres. Approximately 15,690 acres (25 percent of the WSA) are rated outstanding for scenic quality. Peregrine falcons and bald eagles, listed as endangered species, may occasionally visit the WSA. The WSA also has a small resident cougar population. Desert bighorn sheep may migrate into the area. Nine other animal species and seven plant species that are considered sensitive may occur, in the WSA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a potential natural vegetation (PNV) ecosystem not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is entirely juniper-pinyon woodland (61,550 acres). The PNV in the WSA is represented in the NWPS nationally and in Utah and in BLM study areas in Utah and other states. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (Five Hours) of Major Population Centers

The WSA is not within a 5-hour drive of any major population centers.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,082,455
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,644,648

Source: BLM File Data.

BURNING HILLS WILDERNESS STUDY AREA

C. Balancing the Geographic Distribution of Wilderness Areas

The Burning Hills WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January 1987, the NWPS included 64 areas comprising 2,834,115 acres in Utah and Arizona.

There are nine designated wilderness areas within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 26,000-acre Box-Death Hollow Wilderness (U.S. Forest Service [FS]), the 45,000-acre Dark Canyon Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,600-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM) and, to the northwest, the 7,000-acre Ashdown Gorge Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

The Burning Hills WSA could be effectively managed as wilderness in the foreseeable future. Even though there are 12,650 acres of coal lease and 40 acres of oil and gas lease in the WSA, it is expected that these leases would expire and would not be renewed if the area is designated as wilderness. There are 1,300 acres of mining claims in the WSA but development of locatable minerals is not projected in the foreseeable future.

The presence of six in-held sections of State land in the WSA could complicate wilderness management in the long-term future. Of the 3,840 acres of in-held State land, 1,280 acres are leases for oil and gas and 640 are leased for coal. Because of the known coal resources in the WSA, and some potential for oil and gas, it is projected that new access roads to the State land would be required through the area following wilderness designation. Additionally, any coal mining operations on the State lands would reduce wilderness values on the adjacent wilderness lands.

Livestock grazing and maintenance of existing facilities including five spring developments, 1.5 miles of fence, one reservoir, six miles of trail, three corrals and one cabin, would continue, but would not significantly affect the wilderness values of the WSA.

Energy and Mineral Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area.

The entire WSA has a high mineral potential for coal. About 928 million tons of coal, of which 1/3 to 1/2 is recoverable, lies beneath the WSA. The entire WSA has a high mineral potential for titanium, and a moderate mineral potential for oil, gas, carbon dioxide, and geothermal sources in the subsurface. The mineral potential is moderate for thin beds of gypsum and for uranium in the surface and subsurface. Uranium could exist at depths of 1,500 feet and 4,000 feet. The surface area has a low mineral resource potential for all other metals other than uranium and titanium.

Impacts on Resources

The comparative impact table (Table 3) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

With BLM's no wilderness recommendation, no loss of local employment would occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development in the long term. There would be major beneficial and adverse effects in Kane County.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and

BURNING HILLS WILDERNESS STUDY AREA

alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 79 inputs specifically addressing this WSA were received from 121 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 60 commenters supported wilderness designation for part or all of the WSA while 53 commenters were opposed. Eight commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the special features in the WSA. Those commenting in favor of wilderness were almost equally from urban Utah and from other states.

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development. Those opposed were about equally from rural and urban Utah.

Two Federal agencies, the National Park Service (NPS) and USBM commented on the Draft EIS. The NPS concurred with the proposed action. The USBM did not take a position regarding designation or non-designation but commented that BLM had understated the petroleum potential of the WSA.

No comment letters were received on the Final EIS.

There are six State sections (3,840 acres) in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State ranks the WSA as low in wilderness quality with a high significance of conflicts in the region. The State commented that further study is needed to determine the best methods

to protect cultural resources and big-horn sheep.

The Kane County Commission is opposed to wilderness designation of the Burning Hills WSA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. In commenting on the Draft EIS the County supported BLM's no wilderness proposed action alternative.

BURNING HILLS WSA

Table 3
Comparative Summary of Impacts by Alternative

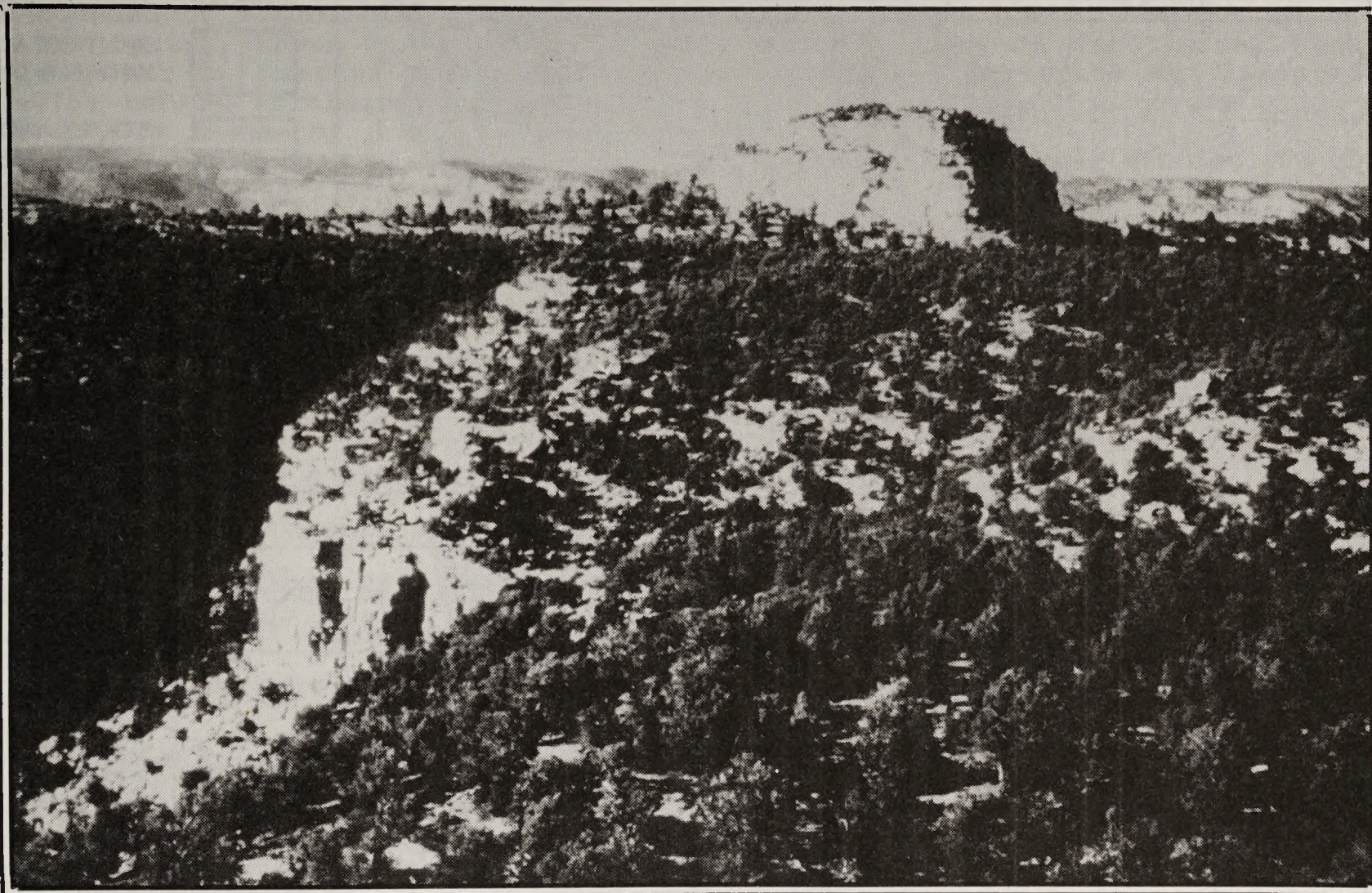
Alternatives	
Issue Topic	Recommendation No Action/No Wilderness
Impacts on Wilderness Values	Wilderness values would not be protected and loss would occur as intrusions increase. In the short-term future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 660 acres of the WSA because of development of range-land projects, vegetation treatments, and access to State lands for mineral exploration. Opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 3,077 acres. Special features including Class A scenery, special status species, and wildlife associated with wilderness would not be significantly affected. Vehicular use of 11 miles of ways would continue to detract from opportunities for solitude and primitive recreation. Over the long term, coal development would result in a direct loss of wilderness values on 40 acres and an indirect reduction of wilderness values in the northern 33 percent (20,311 acres) of the WSA.
Impacts on Vegetation	Special status plant species would not be significantly affected. Only about 1.1 percent (700 acres) of the pinyon-juniper woodland and desert shrub vegetation types in the WSA would be altered as a result of rangeland and wildlife projects and long term coal development. Therefore, there would not be significant changes in the vegetation types in the WSA.
Impacts on Mineral and Energy Exploration and Development	Implementation of the No Action/No Wilderness Alternative would not adversely affect mineral exploration or production because minerals could be leased, claimed and developed as at present.
	All Wilderness (61,550 Acres)
	Wilderness designation would preserve overall the wilderness values in the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost or reduced in quality on 9 acres because of development of access roads to State in-holdings for mineral exploration and because of rangeland improvements. The quality of wilderness values would be indirectly reduced on up to 1,231 acres of the WSA. Special features would be preserved.
	Implementation of the All Wilderness Alternative would not significantly affect the vegetation resource in the WSA. Vegetation types and special status plant species would be protected because potential disturbance would be reduced to 9 acres.
	Wilderness designation would preclude or severely constrain potential development of about 464 million tons of recoverable coal. Loss of exploration and development opportunities for other mineral and energy resources would not be significant because the probability of development is low even if the area is not designated as wilderness.

BURNING HILLS WSA

**Table 3 (Continued)
Comparative Summary of Impacts by Alternative**

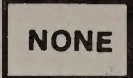


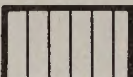
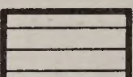
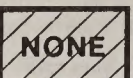
Alternatives	
Issue Topic	Recommendation No Action/No Wilderness
Impacts on Wildlife Habitat and Populations	Wildlife habitat and populations including special status animal species would not be significantly affected. Implementation of the projected wildlife and rangeland projects would benefit by providing additional water, forage, and ecotones. About 1.1 percent (700 acres) of wildlife habitat in the WSA would be affected.
Impacts on Livestock Management	Wilderness designation would preclude 650 acres of vegetation treatments designed to improve wildlife habitat and livestock forage, but would provide all species with additional opportunities for solitude. Only 9 acres of wildlife habitat would be disturbed in the WSA.
Impacts on Livestock Management	Wilderness designation would not significantly affect current livestock management practices. Restricting motorized use of the 11 miles of ways could slightly increase management costs and inconvenience the 23 permittees. The opportunity for an increase of 100 AUMs through 650 acres of vegetation treatments would be foregone.
Impacts on Economic Conditions	Wilderness designation would not significantly affect present local or regional economic conditions. However, new leasing in the WSA would not be allowed; therefore, potential sales and revenues from the coal would be foregone. Over the long term, coal development and associated beneficial and adverse economic impacts would not occur. This would significantly change future economic conditions in Kane County from what they would be without wilderness designation.

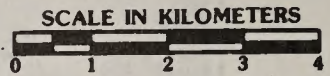
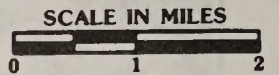
Death Ridge
WSA



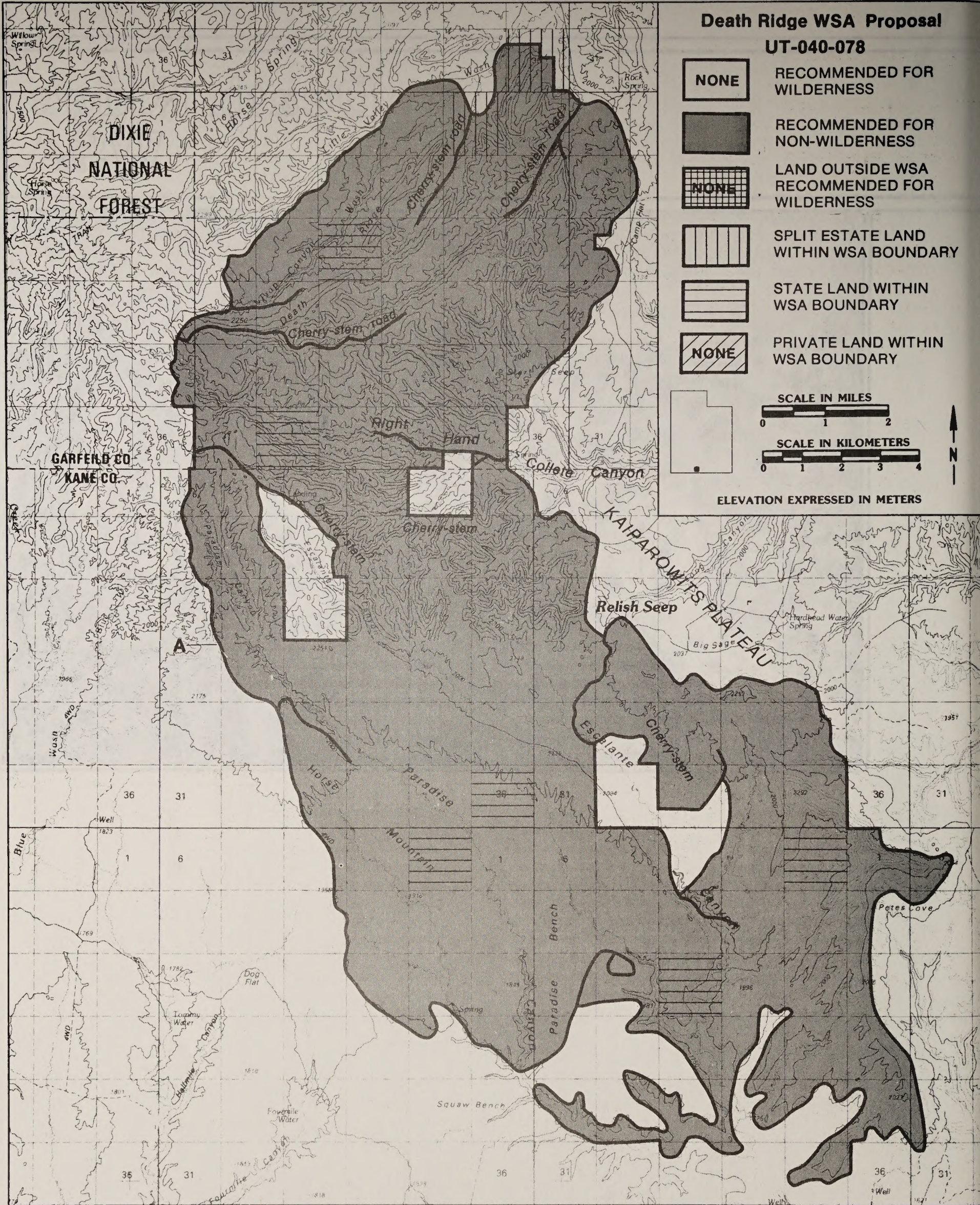
DEATH RIDGE WSA

Death Ridge WSA Proposal UT-040-078

-  NONE RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS



R. 2 E.

R. 3 E.

October 1991

DEATH RIDGE WILDERNESS STUDY AREA

1. THE STUDY AREA: 62,870 acres

The Death Ridge Wilderness Study Area (WSA) (UT-040-078) is in central Garfield and Kane Counties, about 10 miles south of Escalante, Utah (population 662). The unit is a kidney-shaped area about 9 miles from north to south and 8 miles from east to west (see map). The unit is bounded by roads, and is adjacent to Mud Spring Canyon WSA (UT-040-077) to the west and Carcass Canyon WSA (UT-040-076) to the northeast. The WSA includes 62,870 acres of public land administered by the Bureau of Land Management (BLM). Six sections of State land (3,841 acres) are in held in the WSA (see Table 1).

The WSA is part of Kaiparowits Plateau in the Canyonlands Section of the Colorado Plateau Physiographic Province.

The southern part of the WSA consists of benches and canyons and the northern portion is composed of ridges divided by canyons. Elevations in the WSA range from 5,240 feet in the south to almost 8,000 feet in the north. Pinyon-juniper is the main type of vegetation, with scattered sagebrush areas and isolated communities of oak and ponderosa pine.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	62,870
Split-Estate (BLM surface only) ^a	797
In-holdings (State, Private)	3,841
Total	67,508
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	62,870
Split-Estate	797
Total BLM land not recommended for wilderness	63,667
In-holdings (State, Private)	3,841

Source: BLM File Data

^a In this report, split-estate lands are defined as only those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface are classified according to the owner of the surface.

DEATH RIDGE WILDERNESS STUDY AREA

BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative, which is the recommendation in this report, and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

0 acres

(recommended for wilderness)

62,870 acres

(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

All of the study area is in a natural state. About half of the WSA has outstanding opportunities for solitude but none of the study area is considered to have outstanding opportunities for primitive recreation.

The WSA is in the central part of the Kaiparowits Coal Field and about 34 percent (23,244 acres) of the area is leased for coal, with pre-existing rights. Extraction of coal from the Kaiparowits Plateau is not expected in the short term, but any future coal mining would most likely occur on existing leases, including those in the Death Ridge WSA. The long-term future potential for coal extraction is considered to outweigh the wilderness values in the WSA.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is sub-

stantially noticeable. All 62,870 acres in the WSA meet the criteria for naturalness. Less than 1 percent of the WSA, 628 acres, is affected by imprints, which are substantially unnoticeable. The minor overall disturbances are mostly the result of coal exploration drilling. A helicopter was used to conduct geophysical exploration in 1984, but no surface disturbance or impairment occurred that affected the WSA's naturalness. Also during 1987, a spring development on Horse Spring was authorized. It consisted of developing a seep area, laying 200 feet of plastic pipeline, and placing two water troughs. Approximately one-third acre was disturbed. All work was completed with hand tools and did not impair naturalness. No additional imprints have occurred in the WSA as the result of impairing uses or activities allowed under BLM's Interim Management Policy (IMP).

B. Solitude

Overall, about 50 percent (31,435 acres) of the WSA meets the criterion of solitude for areas under wilderness review. These areas are found in canyons and on divides between drainages. The size and configuration of the WSA, in combination with terrain and vegetation, provide opportunities for solitude. The incised canyon drainages and rugged terrain between some canyons, such as Right Hand Collet Canyon and Escalante Canyon, provides screening. Vegetation screening consists of a dense pinyon-juniper woodland cover in rough areas and small stands of Ponderosa pine elsewhere. Rock outcrops on the plateau also provide screening.

Vegetation complements terrain in providing for solitude in most of the WSA. However, the lower portion of the unit lacks sufficient vegetation or isolating terrain and consequently lacks outstanding opportunities for solitude.

C. Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation are not outstanding in the WSA. Hiking is the only activity of any importance, but it is rated as moderate rather than outstanding in quality.

DEATH RIDGE WILDERNESS STUDY AREA

D. Special Features

The diversity of plant life, ranging from low desert shrub to Ponderosa pine, enhances the study and observation of ecology. Three small stands of Ponderosa pine grow in the Alvey Wash drainage in the northeastern portion of the WSA. The Ponderosa pine is adjacent to desert shrub in Alvey Wash and in a tributary to Little Valley Wash. Elevations range from 7,505 feet to 6,500 feet, and pine and desert shrub types can be found in locations less than 1 mile apart. Educational values are present on approximately 2,000 acres. At least two stands of Ponderosa pine also are above the Right Hand Collet Canyon and in the Relish Seep area. Elevations range from 7,526 feet to 6,240 feet, and the distance between the desert shrub and pine types is often less than 1 mile.

The WSA has no known National Register sites, but there is a high potential that such sites exist.

Scenic values are superb in approximately 1,500 acres in the WSA. In the upper portion of Paradise Canyon, the most colorful sandstones in the WSA form the cliffs. The Ponderosa pines growing in the sandstone enhance the scenic value of the area. The canyon in upper Trap Canyon Wash, in the northwestern portion of the WSA, is highly scenic. Two unnamed sandstone monoliths or fins above Alvey Wash are prominent scenic landmarks in the northeastern portion of the WSA. South of Right Hand Collet Canyon, a high sandstone outcrop, an unnamed box canyon immediately below the outcrop, and an adjacent stand of Ponderosa pine provide an area with scenic value.

Peregrine falcons and bald eagles, listed as endangered species, have been reported in the WSA. The WSA has a limited population of cougar.

Nine other animal species and seven plant species that are considered sensitive occur or may occur in the WSA.

Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a potential natural vegetation (PNV) ecosystem not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is entirely juniper-pinyon woodland (62,870 acres). The PNV in the WSA is represented in the NWPS nationally and in Utah, and in other BLM study areas in Utah and other states.

This information is summarized in Table 2 from data compiled in December 1989.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,081,135
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,643,328

Source: BLM File Data.

DEATH RIDGE WILDERNESS STUDY AREA

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is not within a 5-hour drive of any major population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Death Ridge WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January 1987, the NWPS included 64 areas comprising 2,834,115 acres in Utah and Arizona.

There are nine designated wilderness areas within 100 miles of the WSA. In a clockwise direction, beginning to the north, are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 45,000-acre Dark Canyon Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,600-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,800-acre Cottonwood Point Wilderness (BLM), and to the west, the 7,000-acre Ashdown Gorge Wilderness (FS), and the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Cherry-stemmed roads penetrate the WSA at several places, resulting in an awkward boundary configuration that would be difficult to survey, recognize on the ground, and manage. The Death Ridge WSA could be effectively managed as wilderness in the foreseeable future. Even though there are 19,381 acres of coal lease, 1,378 acres of pre-FLPMA oil and gas leases and 2,485 acres of post-FLPMA oil and gas lease in the WSA, it is expected that these leases would expire and would not be renewed if the area is designated as wilderness. There are no mining claims in the WSA and development of locatable minerals is not projected in the foreseeable future.

The presence of eight in-held sections of State land in the WSA, including split-estate, could complicate wilder-

ness management in the long-term future. Of the 4,638 acres of in-held State land, 1,921 acres are leased for oil and gas and 1,280 are leased for coal. Because of the known coal resources in the WSA, and some potential for oil and gas, it is projected that new access roads to the State land would be required through the area following wilderness designation. Additionally, any coal mining operations on the State lands and cherry-stems would reduce wilderness values on the adjacent wilderness lands.

Livestock grazing and maintenance of existing facilities including one spring development, 2 miles of fence, two reservoirs, two troughs, and 6 miles of pipeline would continue, but would not significantly affect the wilderness values of the WSA.

Energy and Mineral Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area.

The entire WSA has a high mineral potential for coal. The entire WSA has a moderate mineral potential for oil, gas, carbon dioxide, geothermal sources, uranium, and gypsum in the subsurface, and a low mineral resource potential for all metals other than titanium and uranium.

According to BLM geologists, the potential for undiscovered oil and gas resources is high, although oil and gas deposits in the WSA are not expected to be large. Minable coal-bearing strata underlie the entire WSA. An estimated 1.587 billion tons of coal are in the WSA, of which about 1.5 billion tons are less than 2,000 feet beneath the surface. The coal is of relatively high quality.

Impacts on Resources

The comparative impact table (Table 3) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

DEATH RIDGE WILDERNESS STUDY AREA

Local Social and Economic Considerations

With BLM's no wilderness recommendation, no loss of employment or income would occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy exploration and eventual development in the long term. There would be major beneficial and adverse effects in Garfield and Kane Counties.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 64 inputs specifically addressing this WSA were received from 341 commenters including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 43 commenters supported wilderness designation for part or all of the WSA, while 293 commenters were opposed. Five commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the specific features in the WSA, opportunities for solitude, and the value of wilderness as equal to or greater than the existing nonwilderness values. The majority of those commenting in favor of wilderness were from other states. Of particular concern was the need to protect the area from development.

Those opposing wilderness were concerned that wilderness would conflict with or preclude mineral exploration and development, livestock operations, flood control and water rights, public access, or other uses; is not compatible with mul-

tiple use; would harm State/local economies; and that designation is not necessary to protect the WSA. The great majority of those opposed were from rural Utah.

No Federal agencies commented on this WSA.

No comment letters were received on the Final EIS.

There are six State sections (3,841 acres) and two sections (797 acres) of split-estate lands with State minerals in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State considers the Death Ridge WSA to have low wilderness values and very high conflicts with potential coal development.

The Kane and Garfield County Commissions are opposed to wilderness designation of the Death Ridge WSA and have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS the Counties supported BLM's no action/no wilderness proposed action.

The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. Garfield County previously proposed to the Utah Congressional Delegation that 111,053 acres of BLM lands in three WSAs and 31,600 acres in one FS unit in the County be recommended as wilderness. The Garfield County Master Plan recommends that the remaining lands in the County, including the Death Ridge WSA, be retained for multiple uses.

DEATH RIDGE WSA

Table 3
Comparative Summary of Impacts by Alternative

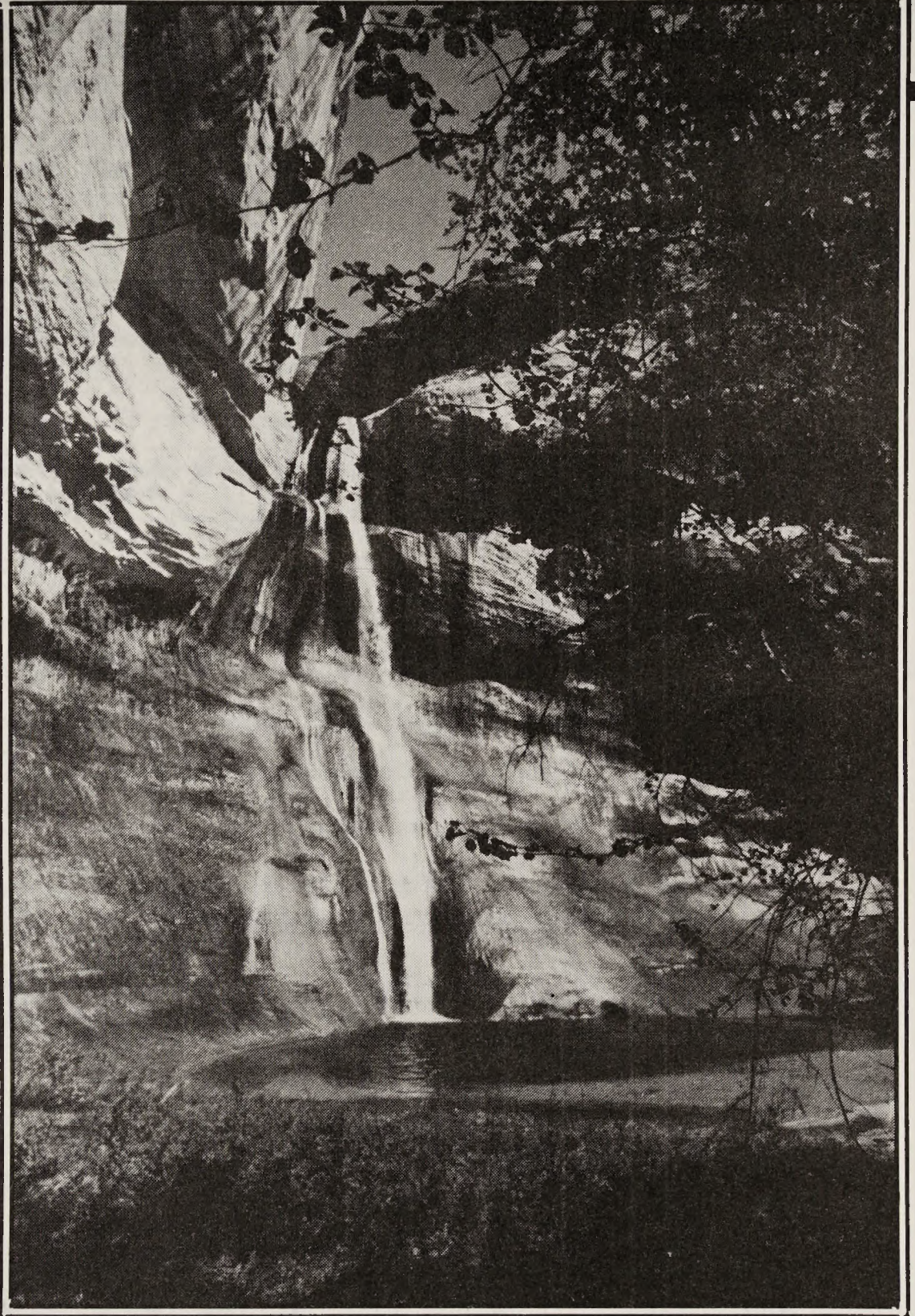
Issue Topic	Alternatives	
	Recommendation No Action/No Wilderness	All Wilderness (62,870 Acres)
Impacts on Wilderness Values	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the short term, naturalness and opportunities for solitude and primitive recreation would be directly lost on 305 acres because of vegetation treatments, rangeland projects, and construction of access roads to State lands and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 1,886 acres. Special features, including scenic values, special status species, educational values, and wildlife associated with wilderness would not be significantly affected. In the long term, coal development would result in direct loss of wilderness values on 40 acres and an indirect reduction on up to an additional 20,800 acres in the eastern portion of the WSA.	Wilderness designation would preserve wilderness values overall in the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 4 acres because of construction of access roads to in-held State lands. Wilderness values would be indirectly reduced in quality on up to 1,257 acres. Wilderness values would be temporarily affected on 1 acre by rangeland projects but the wilderness management criteria would be met. Special features would be preserved.
Impacts on Vegetation	Special status plant species would not be significantly affected. Less than 1 percent (345 acres) of the pinyon-juniper woodland and sagebrush type in the WSA would be altered as a result of rangeland projects, construction of access roads and long term coal development. Therefore, there would not be significant changes in the vegetation types in the WSA.	Implementation of the All Wilderness Alternative would not significantly affect the vegetation resource in the WSA. Vegetation types and special status plant species would be protected because potential disturbance would be reduced to 5 acres.
Impacts on Mineral and Energy Exploration and Production	Implementation of the No Action/No Wilderness Alternative would not adversely affect mineral exploration or production because minerals could be leased, claimed, and developed as at present.	Wilderness designation would preclude potential development of about 800 million tons of recoverable coal. Loss of exploration and development opportunities for other mineral and energy resources would not be significant because the probability of development is low even if the area is not designated as wilderness.

DEATH RIDGE WSA

Table 3 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Recommendation No Action/No Wilderness	Alternatives	All Wilderness (62,870 Acres)
Impacts on Wildlife Habitat and Populations	Wildlife habitat and populations including special status animal species would not be significantly affected. Implementation of the vegetation treatment project would benefit wildlife by providing additional forage and ecotones. Less than 1 percent (345 acres) of the wildlife habitat in the WSA would be disturbed.		Wilderness designation would preclude 300 acres of vegetation treatment which would improve wildlife habitat, but designation would provide all species with additional opportunities for solitude. Only 5 acres of wildlife habitat would be disturbed in the WSA.
Impacts on Livestock Management	Livestock management and grazing levels would not be adversely affected because access and management practices would continue as at present. Approximately 300 acres of seeding that would provide 46 AUMs of forage could be done.		Wilderness designation would not significantly affect current livestock management practices. Restricting motorized use of the 18 miles of way could increase management costs and inconvenience 20 permittees. The opportunity for an increase of 46 AUMs through vegetation treatments would be foregone.
Impacts on Economic Conditions	No loss of employment or income would occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy exploration and eventual development in the long term. There would be major beneficial and adverse effects in Garfield and Kane Counties.		Wilderness designation would not significantly affect present local or regional economic conditions. However, new leasing in the WSA would not be allowed; therefore, potentially significant sales and revenues from coal would be foregone. Over the long term, coal development and associated beneficial and adverse economic impacts would not occur. This would significantly change future economic conditions in Kane and Garfield Counties from what they would be without wilderness designation.

Phipps Death- Hollow ISA

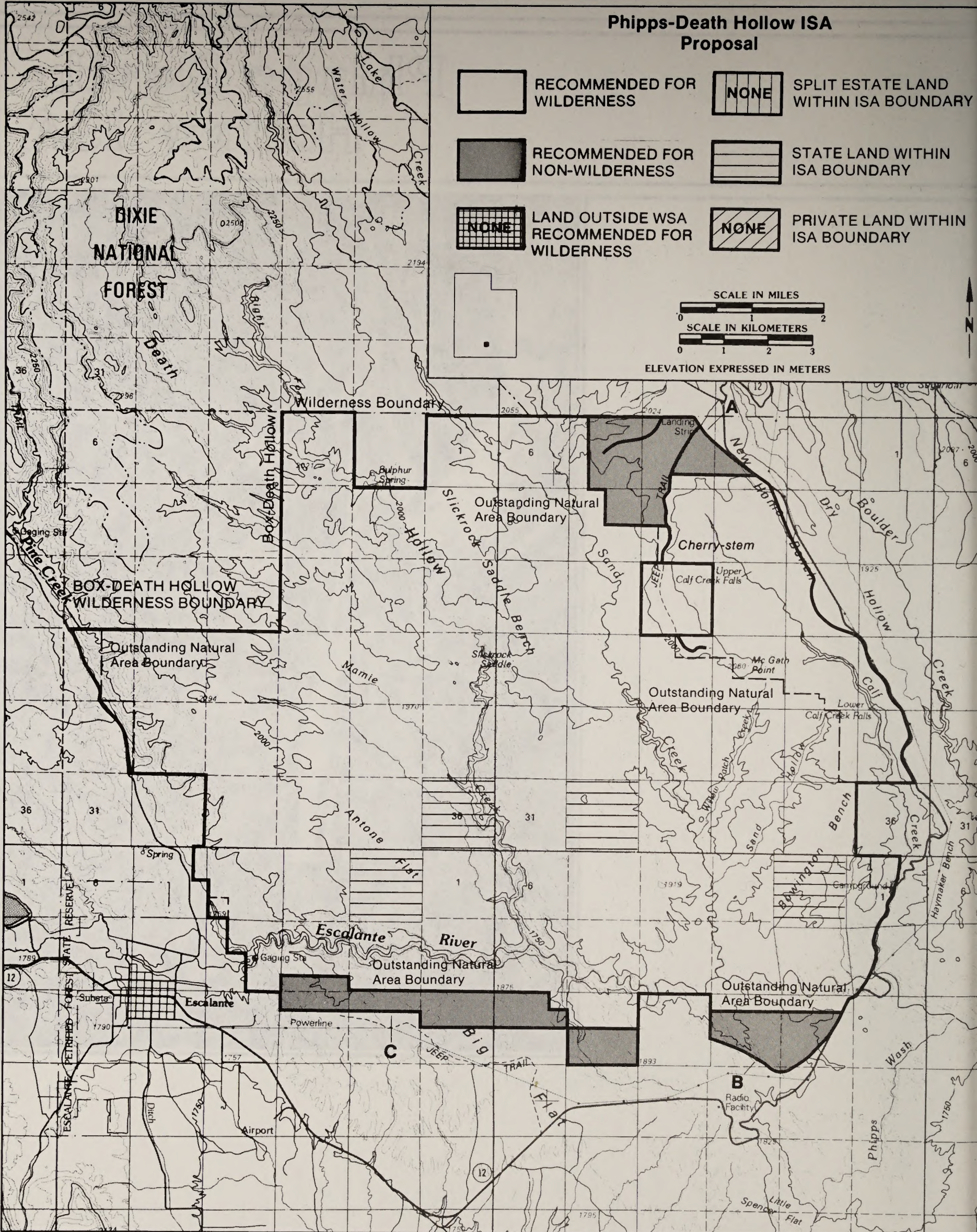


PHIPPS-DEATH HOLLOW ISA

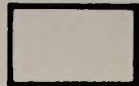
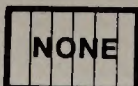

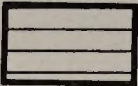
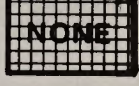
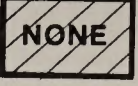
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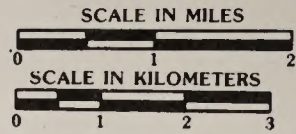
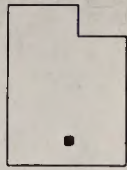
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Phipps-Death Hollow ISA Proposal

- | | | | |
|---|--|---|--|
|  | RECOMMENDED FOR WILDERNESS |  | NONE SPLIT ESTATE LAND WITHIN ISA BOUNDARY |
|  | RECOMMENDED FOR NON-WILDERNESS |  | STATE LAND WITHIN ISA BOUNDARY |
|  | NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS |  | NONE PRIVATE LAND WITHIN ISA BOUNDARY |



ELEVATION EXPRESSED IN METERS

PHIPPS-DEATH HOLLOW INSTANT STUDY AREA

1. THE STUDY AREA: 42,731 acres

The Phipps-Death Hollow Instant Study Area (ISA) is in eastern Garfield County, about 1 mile east of Escalante, Utah (population 652). The ISA is approximately 9 miles from north to south by 11 miles from east to west (see Map). The study area is adjacent to the Box-Death Hollow Wilderness of the Dixie National Forest on the north and northwest. The study area is bounded by Highway 12, utility lines, State lands, and a campground on the east. On the west, the study area is bounded by State and private lands and the Pine Creek road. The southern boundary is along section lines.

There are 42,731 acres of public land administered by the Bureau of Land Management (BLM) in the ISA. Four State sections (2,559 acres) are inheld in the ISA and would be included in the portion recommended for wilderness (see Table 1).

The Escalante River crosses the extreme southern portion of the ISA from west to east. Steep walled canyons, mesas, benches, natural bridges, and arches characterize the ISA. Elevations range from 5,400 feet on the Escalante River, in the southeastern corner of the study area, to about 7,600 feet on the northwestern side of the unit.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	42,731
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	2,559
Total	45,290
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the ISA)	39,256
BLM (outside the ISA)	0
Split-Estate (within the ISA)	0
Split-Estate (outside the ISA)	0
Total BLM land recommended for wilderness	39,256
In-holdings (State, private)	2,559
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	3,475
Split-Estate	0
Total BLM land not recommended for wilderness	3,475
In-holdings (State, Private)	0

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings included within the portion of the ISA recommended for designation.

PHIPPS-DEATH HOLLOW INSTANT STUDY AREA

Approximately 40 miles of perennial streams, including the Escalante River, flow through the ISA. All of the portion of the Escalante River in the ISA is in the area recommended for wilderness designation. Most of the vegetation is pinyon-juniper, with some ponderosa pine in the higher elevations and riparian vegetation along the Escalante River.

The ISA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative where 39,256 acres would be designated as wilderness and the remaining 3,475 acres would be released for other uses, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 39,256 acres
(recommended for wilderness)
- 3,475 acres
(recommended for nonwilderness)

The recommendation for the ISA is to designate 39,256 acres as wilderness and to release the remaining 3,475 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The portion recommended for wilderness designation would include the highest wilderness values in the ISA. All of the proposed area is natural. About 92 percent has outstanding solitude and 94 percent has outstanding opportunities for primitive recreation. Special features include scenic, geologic, historic, and archaeological values and the recommended area includes Upper and Lower Calf Creek Falls, which have high interest for visitors. About 87 percent of the area was designated as an Outstanding Natural Area (ONA) in 1970, and

about 99 percent of the area is currently closed to off-road vehicle (ORV) use.

Part of the recommended portion is in a known geologic structure with high potential for carbon dioxide, but the proven discovery is north of the ISA. The high wilderness values are considered to outweigh potential gas production in the ISA. Wilderness designation would be compatible with the U.S. Forest Service (FS) management of the adjacent Box-Death Hollow Wilderness established in 1984.

Areas A, B, and C not proposed for wilderness designation are at the northeast corner and along the southern boundary of the ISA. These areas lack outstanding opportunities for solitude and primitive recreation.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The entire ISA meets the Wilderness Act criteria for naturalness, although the imprints of human activity can be detected. The ISA is an undisturbed area of deep canyons and slickrock benches. Together, the ISA and adjacent Box-Death Hollow Wilderness combine to create a very remote and high quality area of naturalness at the headwaters of the Escalante River. Imprints of man in the ISA include a gauging station on the Escalante River about 1 mile east of Escalante and 10 miles of historical routes. These imprints affect less than 1 percent of the ISA (5 acres) and are substantially unnoticeable. In the Phipps-Death Hollow ISA, the high quality of naturalness has not changed since 1980. No additional imprints have occurred in the ISA as a result of impairing uses or activities allowed under the BLM Interim Management Policy (IMP).

PHIPPS-DEATH HOLLOW INSTANT STUDY AREA

B. Solitude

Conditions in approximately 36,000 acres or 84 percent of the ISA meet the criterion for outstanding solitude in lands under wilderness review. The remaining 6,731 acres do not meet the outstanding criterion.

Outstanding opportunities for solitude in the ISA occur particularly in the deep winding canyons of five major drainages. The Escalante River, Calf Creek, Sand Creek, and three tributaries (Mamie Creek, Death Hollow, and Right Fork of Death Hollow) all flow in entrenched, winding canyons. Although each of the canyon drainages is characterized by bare rock surfaces, a variety of canyon landscapes exist. Some canyons, such as Calf Creek, have inner gorges in slickrock bowls or basins. The Escalante River Canyon is a very deep, large canyon. The Mamie Creek-Death Hollow drainage contains inner gorges and narrows, perched canyons, and numerous slots and ridges. The North Fork-Death Hollow area is similar to the Mamie Creek area, but the inner gorge is deeper, with more narrows. The canyon areas in the ISA all provide outstanding opportunities for solitude. Canyons and adjacent terrain where there are outstanding opportunities for solitude total approximately 19,900 acres of the ISA.

The opportunity for solitude on the benches is outstanding where the benches are isolated. The Antone Flat Bench, for example, includes the entire Mamie Creek-Pine Creek divide from Antone Flat to the Box-Death Hollow Wilderness boundary. This bench and Slickrock Saddle Bench below Slickrock Saddle are very isolated. The opportunity for solitude on Slickrock Saddle Bench above Slickrock Saddle diminishes toward the Dixie National Forest boundary. Below the confluence of Sweetwater and Sand Creeks, the canyon cliffs provide outstanding solitude. Bowington Bench is completely isolated by the Calf Creek and Sand Creek Canyon cliffs and the McGrath Point Bench cliff. All of Bowington Bench has outstanding opportunities for solitude. Outstanding opportunities for solitude exist on 16,100 acres of the benches.

C. Primitive and Unconfined Recreation

Opportunities for primitive recreation are outstanding on 36,800 acres or 86 percent of the ISA, but 5,931 acres do not meet the outstanding criterion. Opportunities in the ISA are outstanding for camping, backpacking, hiking, horseback riding, and sightseeing for cultural and geological features.

Foot and horseback recreation are of high quality throughout most of the ISA. Scenic geology in the ISA is excellent. In this sense, most of the ISA represents a sightseeing destination, especially to the Upper and Lower Calf Creek Falls, Death Hollow Canyon, Escalante Natural Bridge, and the Escalante River Canyon.

Sightseeing for historical and archaeological features is also excellent in much of the ISA because of the number, wide distribution, and linear configuration of many of these features. Historic routes include the Boulder Mail Trail, first Boulder-Escalante telephone line, Old Boulder Road, and the Boynton Road. Archaeological sites have been identified in Calf Creek, Death Hollow, Sand Creek, and the Escalante River.

A variety of experiences also enhances hiking and backpacking. Fishing opportunities in Calf Creek and Death Hollow augment hiking, backpacking, and horseback riding. The variety of routes contributes to the outstanding quality of hiking, backpacking, and horseback riding. The ISA provides an array of canyon routes for hikers and horseback riders. Because it is not limited by time or by riding terrain, backpacking has the most route options. These options include all of the canyon systems and the Pine Creek-Death Hollow divide, Slickrock Saddle Bench, Bowington Bench, Upper Calf Creek Basin, and a portion of Big Flat. Some portions of these bench areas are also within the range of hikers. Backpacking in the ISA is further enhanced by the continuation of the Death Hollow Canyon hiking routes into the Box-Death Hollow Wilderness in the Dixie National Forest.

PHIPPS-DEATH HOLLOW INSTANT STUDY AREA

D. Special Features

The Lower Calf Creek Falls trail in Calf Creek Canyon includes the area of the Calf Creek Canyon between the Lower Falls and the campground. This portion of Calf Creek Canyon includes approximately 200 acres with significant educational values.

The Phipps-Death Hollow ISA, in the upper part of the Escalante River, has landscape features not found in the middle and lower portions of this drainage. For example, white-and-yellow Navajo sandstones are in greater abundance in the landscape and the canyons are the deepest in the drainage system. Approximately 38,931 acres in the ISA exhibit outstanding scenery. The Escalante River Canyon within the ISA is 1,100 feet deep between the mouth of Mamie Creek and the community of Escalante. The canyon walls are rough and broken, and the canyon is narrow and it meanders. The canyon is impressive throughout its length. Escalante Natural Bridge, a 130-foot-high bridge with a span of 100 feet, is in the south wall of the canyon. Four other natural bridges and arches are in the ISA.

Scenic values are excellent in the bench and canyon areas between Slickrock Saddle Bench and Calf Creek Canyon. Where sandstone outcroppings and points are present on the benches, scenic values are high. Very high quality scenic features are in the Calf Creek Canyon area, where red walls, alcoves, two waterfalls, and extensive expanses of white slickrock are present. Lower Calf Creek Falls is 126 feet high and Upper Calf Creek Falls is 86 feet high.

The Death Hollow portion of the ISA is one of the most scenic parts of the Escalante River drainage. Death Hollow Canyon is deep and meandering, with narrows 1,000 feet deep in some sections of the canyon. Above the canyon, the basin through which Mamie Creek flows is a dissected area of canyons, tanks, and other features. Ponderosa pine grows in places. Antone Flat, a sagebrush park in the southern portion of this area, is one of the few places in the ISA where soil cover remains. The Escalante monocline forms the divide between Mamie Creek and Pine Creek. The Pine Creek

side is a scenic, dissected, 1,000-foot rock face. The top of the monocline is a narrow ridge covered with ponderosa pine.

Historical values include the Boulder Mail Trail, Boynton Road, Old Boulder Road, Washington Phipps Grave, and the Escalante-Boulder telephone line. The Boulder Mail Trail was used to carry mail and goods between the Towns of Escalante and Boulder. Much of the trail is still visible, especially where it was necessary to construct the trail through slickrock. The trail has been nominated to the National Register of Historic Places and is becoming a popular backpacking route in the ISA. Approximately 13 miles of the trail are present in the ISA.

The Boynton Road was constructed in 1909 as a shortcut between Escalante and Salt Gulch. The road was abandoned after 2 years when water washed away portions of the road, but it is still visible in approximately 90 percent of the 10-mile route. The Old Boulder Road was the main route between Escalante and Boulder until the Civilian Conservation Corps built the Hell's Backbone Road and Highway 12 in the 1930s. Approximately 1.5 miles of the road are within the ISA. In 1911, the FS constructed the first telephone line between Escalante and Boulder. This line provided the first telephone service to the area and was used until 1955 when it was replaced by a microwave system. Most of the line between Antone Flat and Sand Creek is still visible. The wire is missing between Sand Creek and Boulder. Approximately 7.5 miles of the route are within in the ISA but are only partially evident.

The Friendship Cove Pictograph is an archaeological site that has been nominated to the National Register of Historic Places.

Bald eagles and peregrine falcons, listed as endangered or threatened species, may occur in the ISA. Seven other animal species and eight plant species that are considered sensitive may occur in the ISA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide

PHIPPS-DEATH HOLLOW INSTANT STUDY AREA

Wilderness Final EIS for additional information.

The Escalante River through the ISA is part of a longer segment nominated for study under Section 5(d) of the Wild and Scenic Rivers Act of 1968 by the Secretaries of the Interior and Agriculture on September 11, 1970.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this ISA would not add a potential natural vegetation (PNV) ecosystem not presently represented in the NWPS. PNV is the vegetative type that would eventually become the climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The ISA is in the Colorado Plateau Province/Ecoregion. The PNV in the ISA is entirely juniper-pinyon woodland (42,731 acres). The PNV in the ISA is well represented in the NWPS nationally and in BLM study areas in Utah and other states. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The ISA is not within a 5-hour drive of any major population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Phipps-Death Hollow ISA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January, 1987, the NWPS included 64 areas comprising 2,834,115 acres in Utah and Arizona.

There are eight designated wilderness areas within 100 miles of the ISA. The ISA is immediately south and southeast of the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]). Within 100 miles to the east is the 45,000-acre Dark Canyon Wilderness (FS). To the south is the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), and to the southwest of the ISA, the 40,600-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), and 6,860-acre Cottonwood Point Wilderness (BLM), and to the west, the 7,000-acre Ashdown Gorge Wilderness (FS) and 50,000-acre Pine Valley Mountain Wilderness (FS).

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,101,274
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,663,467

Source: BLM File Data.

PHIPPS-DEATH HOLLOW INSTANT STUDY AREA

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

The entire ISA, including the portion recommended for wilderness designation can be managed as wilderness to preserve values now present in the area. There are 3,225 acres of pre-FLPMA oil and gas leases in the ISA. It is likely that at least a portion of these leases will be explored or developed for oil and gas or carbon dioxide. It is estimated that development would cause 20 acres of surface disturbance inside the ISA. This situation would be similar to the manageability scenario in the adjacent Box-Death Hollow Wilderness which is effectively managed by the FS to preserve its wilderness character.

Management of the recommended area could be somewhat complicated by the presence of four in-held sections of State land. Of the 2,559 acres of in-held land, 640 acres are presently leased for oil, gas and hydrocarbons. Because of the potential for carbon dioxide in the ISA it is likely that access will be required for exploration of State lands. Additionally, development and production on these lands would reduce the quality of wilderness values in the adjacent wilderness.

There are no mining claims in the ISA. There is some potential for uranium in the area, but because of poor economic conditions, development of uranium is not expected. Livestock grazing and maintenance of 1 mile of fence would continue in the recommended area and would not affect wilderness values.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral resource potential open file report for the Phipps-Death Hollow ISA (USGS Open File Report 81-558, Gordon W. Weir and Michael E. Lane, 1981). The report indicates that the mineral and energy resource potential in the ISA is low. A manganese deposit in the southwestern corner of the ISA is too small to yield ore in commercial quantities. Oil and gas test wells near the ISA were dry, and the oil and gas potential of the area appears to be low.

Additional study by BLM geologists indicate that the potential for coal and geothermal resources is also low. The potential for undiscovered resources of carbon dioxide is moderate, however, as indicated by discovery of a large deposit about 7 miles north of the ISA. The rock structure that contains carbon dioxide reserves may not be so extensive as to include the ISA, therefore there is no certainty that this resource exists in the study area.

The potential for undiscovered uranium resources is moderate, but any deposits of uranium that may exist in the ISA would be well beneath the surface, limiting the likelihood of their development.

The potential for recovery of gypsum from the ISA is low. A small deposit of gypsum exists on the southwestern side of the ISA, but better and larger deposits are nearby, outside the ISA. Gravel and stone in the ISA have no unique or special qualities, and similar materials are found elsewhere in the region.

Impacts on Resources

The comparative impact table (Table 3) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Partial designation would result in a temporary (2 to 3 year) increase of 25 jobs due to development of the carbon dioxide resource. This would be 175 jobs less than the increase which could occur from implementation of the No Action/No Wilderness Alternative. Other local economic conditions would not be affected. Increases in recreational use could provide up to \$822,000 to the local economy.

Summary of ISA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the ISA.

PHIPPS-DEATH HOLLOW INSTANT STUDY AREA

During formal public review of the Draft EIS, a total of 117 inputs specifically addressing this ISA were received from 435 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statement by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 116 commenters supported wilderness designation for part or all of the ISA, while 311 were opposed. Eight commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented that the value of wilderness equals or exceeds that of nonwilderness resources, noted special features and opportunities for primitive recreation. The majority of those commenting in favor of wilderness were from other states. Of particular concern was the need to protect the area from development.

Those opposing wilderness were concerned that wilderness would conflict with or preclude mineral exploration and development, livestock operations, flood control and water rights, public access, or other uses; is not compatible with multiple use; would harm State/local economies; and that designation is not necessary to protect the ISA. Almost all of those opposed were from rural Utah.

Three Federal agencies, the FS, USBM, and the U.S. Bureau of Reclamation (USBR) commented on the Draft EIS. The FS concurred with BLM's proposed partial wilderness alternative. The FS further noted that there is no trailhead at the top of Death Hollow and that hikers were traversing dangerous, steep talus slopes and cliffs into the ISA.

The USBM commented that BLM had underestimated the petroleum potential of the ISA. The USBR pointed out that designation of the ISA would conflict with their Escalante Project, but planning on the project has been inactive for several years and will likely remain inactive in the foreseeable future.

No comment letters were received on the Final EIS.

There are four State sections (2,559 acres) in the ISA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the ISA. The State considers the ISA to have high wilderness values as part of the Escalante River system and moderate conflicts compared with WSAs in this part of the region. The State commented that the carbon dioxide and oil and gas resource potential requires further assessment before any conflict can be adequately characterized.

The Garfield County Commission is opposed to wilderness designation of the Phipps-Death Hollow ISA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. Garfield County previously proposed to the Utah Congressional Delegation that 111,053 acres of BLM lands in three study areas including 39,256 acres in the Phipps-Death Hollow ISA, and 31,600 acres in one FS unit in the County be recommended as wilderness. In commenting on the Draft EIS, the County noted that only 180 acres of the ISA are projected to be disturbed with the no action alternative, and existing BLM controls, such as ONA designation are adequate to protect the area while allowing for development of carbon dioxide.

PHIPPS-DEATH HOLLOW ISA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives			
Issue Topic	Recommendation Partial Wilderness (39,256 Acres)	No Action/No Wilderness	All Wilderness (42,731 Acres)
Impacts on Wilderness Values	Wilderness values would be preserved overall in the designated area which is approximately 92 percent of the WSA. Naturalness and opportunities for solitude and primitive recreation would be directly lost or reduced in quality on 32 acres because of exploration and development of oil, gas, and carbon dioxide, construction of access roads to in-held State lands, and rangeland projects and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 2,137 acres of the WSA. Special features including the Escalante River would be preserved overall. Some Class A scenery would be reduced in quality. Use of 1 mile of vehicular way in the nondesignated portion would continue to occasionally detract from opportunities for solitude and primitive recreation in the WSA. This alternative would enhance and complement wilderness values, uses, and management of the contiguous FS wilderness area.	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 322 acres because of exploration and development of oil, gas, and carbon dioxide, construction of access roads to in-held State lands, and rangeland projects and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 6,410 acres of the ISA. Most special features including historical and archaeological values, special status species, and perennial streams would not be significantly affected. Class A scenery would be reduced in quality in the disturbed areas and the Escalante River would not receive additional protection. Vehicular use of 11 miles of ways and mining roads would occasionally detract from opportunities for solitude and primitive recreation in the ISA. This alternative would not enhance or complement wilderness values, uses, and management of the contiguous FS wilderness area.	Wilderness designation would preserve overall the wilderness values throughout the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost or reduced in quality on 32 acres because of exploration and development of oil, gas, and carbon dioxide, construction of access roads to in-held State lands, and rangeland projects and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 2,139 acres of the WSA. Special features, including Class A scenery, historical and archaeological values, special status species, and perennial streams including the Escalante River would be preserved overall. Some Class A scenery would be reduced in quality in the disturbed areas. This alternative would enhance wilderness uses, values, and management of the contiguous FS wilderness area.
Impacts on Water Resources	The impacts on water resources and conclusions would be the same as with the All Wilderness Alternative because perennial streams would pass through the designated area.	Water quality would not significantly change as a result of implementation of the No Action/No Wilderness Alternative because of required mitigation and management restrictions on mineral and ORV activity. Present or future water uses would not be affected because water could be developed without consideration of wilderness values.	In the short term, wilderness designation would not significantly alter water quality or uses. In the long term, future water diversion and new and consumptive uses in the Escalante River system upstream of the ISA may be restricted or precluded.

PHIPPS-DEATH HOLLOW ISA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Alternatives			
Issue Topic	Recommendation Partial Wilderness (39,256 Acres)	No Action/No Wilderness (42,731 Acres)	All Wilderness (42,731 Acres)
Impacts on Mineral and Energy Exploration and Production	Implementation of the Partial Wilderness Alternative would limit potential exploration and development of carbon dioxide resources with more restrictive conditions being placed on the methods and manner in which the existing leases are explored and developed. No significant locatable mineral resource would be foregone because the probability of development is low even without wilderness designation.	Implementation of the No Action/No Wilderness Alternative would not adversely affect mineral and energy beyond the limitations which are already in effect. Mineral leasing, location of mining claims, and mineral development would continue as at present.	Wilderness designation would limit potential exploration and development of carbon dioxide resources with more restrictive conditions being placed on the methods and manner in which the existing leases are explored and developed. No significant locatable mineral production would be foregone because the probability of development is low even without wilderness designation.
Impacts on Visual Resources	Because total surface disturbance in the ISA would be about the same in the All Wilderness Alternative, the impacts and conclusions would be the same.	With the implementation of the No Action/No Wilderness Alternative, visual resources would be preserved overall. However, visual quality could be impaired on up to 15 percent (6,410 acres) of the ISA.	With implementation of the All Wilderness Alternative visual resources would be preserved overall. However, visual quality could be impaired on up to 5 percent (2,137 acres) of the ISA.
Impacts on Recreation	Implementation of this alternative would benefit primitive recreational opportunities by reducing the likelihood and extent of surface disturbing activities and increasing management attention and recognition of recreational values. The partial wilderness designation would provide additional protection for 14.9 miles of the Escalante River, a segment of the National Wild and Scenic River Inventory.	The quality of the primitive recreation opportunity would be reduced on the western half of the ISA. Recreational vehicles would continue to be precluded on 38,800 acres. About 14.9 miles of a wild and scenic river inventory stream segment would not receive additional protection.	The All Wilderness Alternative would benefit primitive recreation by reducing the likelihood and extent of surface-disturbing activities and increasing management attention and recognition of recreational values. Wilderness designation would provide additional protection for 14.9 miles of the Escalante River, a segment of the National Wild and Scenic River Inventory.

PHIPPS-DEATH HOLLOW ISA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives	
Issue Topic	Recommendation Partial Wilderness (39,256 Acres)	No Action/No Wilderness	All Wilderness (42,731 Acres)
Impacts on the Boulder Air Field	Implementation of this alternative would not affect the potential expansion and use of the Boulder Air Field.	Expansion and use of the Boulder Air Field would not be affected with implementation of the No Action/No Wilderness Alternative.	Expansion of physical facilities and use of the Boulder Air Field could be precluded or reduced with wilderness designation.
Impacts on Local Economic Conditions	Partial designation would result in a temporary (2 to 3 year) increase of 25 jobs due to development of the carbon dioxide resource. This would be 175 jobs less than the increase which could occur from implementation of the No Action/No Wilderness Alternative. Other local economic conditions would not be affected. Increases in recreational use could provide up to \$822,000 to the local economy.	Mineral activity would create both beneficial and adverse impacts on the local economy. Local employment in Garfield County would increase by about 10 percent (200 to 300 jobs) over a 3 year period. Long term employment would increase less than 1 percent (20 jobs). Recreation-related expenditures could contribute up to \$822,000 annually to the local economy.	Wilderness designation of the entire ISA would result in a temporary (2 to 3 year) increase of 25 jobs due to development of the carbon dioxide resource. However, this would be 175 jobs less than the increase which could occur from implementation of the No Action/No Wilderness Alternative. Increased recreational use could provide up to \$822,000 to the local economy. Other local economic conditions would not be affected.

PHIPPS-DEATH HOLLOW INSTANT STUDY AREA

Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 34 S., R. 3 E., Sec. 36	638.08		State	Nb	Exchange		\$2,000
T. 34 S., R. 4 E., Sec. 32	640.00		State	Nb	Exchange		\$2,000
T. 35 S., R. 3 E., Sec. 2	640.00		State	Nb	Exchange		\$2,000
T. 35 S., R. 4 E., Sec. 2	640.96		State	Nb	Exchange		\$2,000

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

Steep Creek WSA



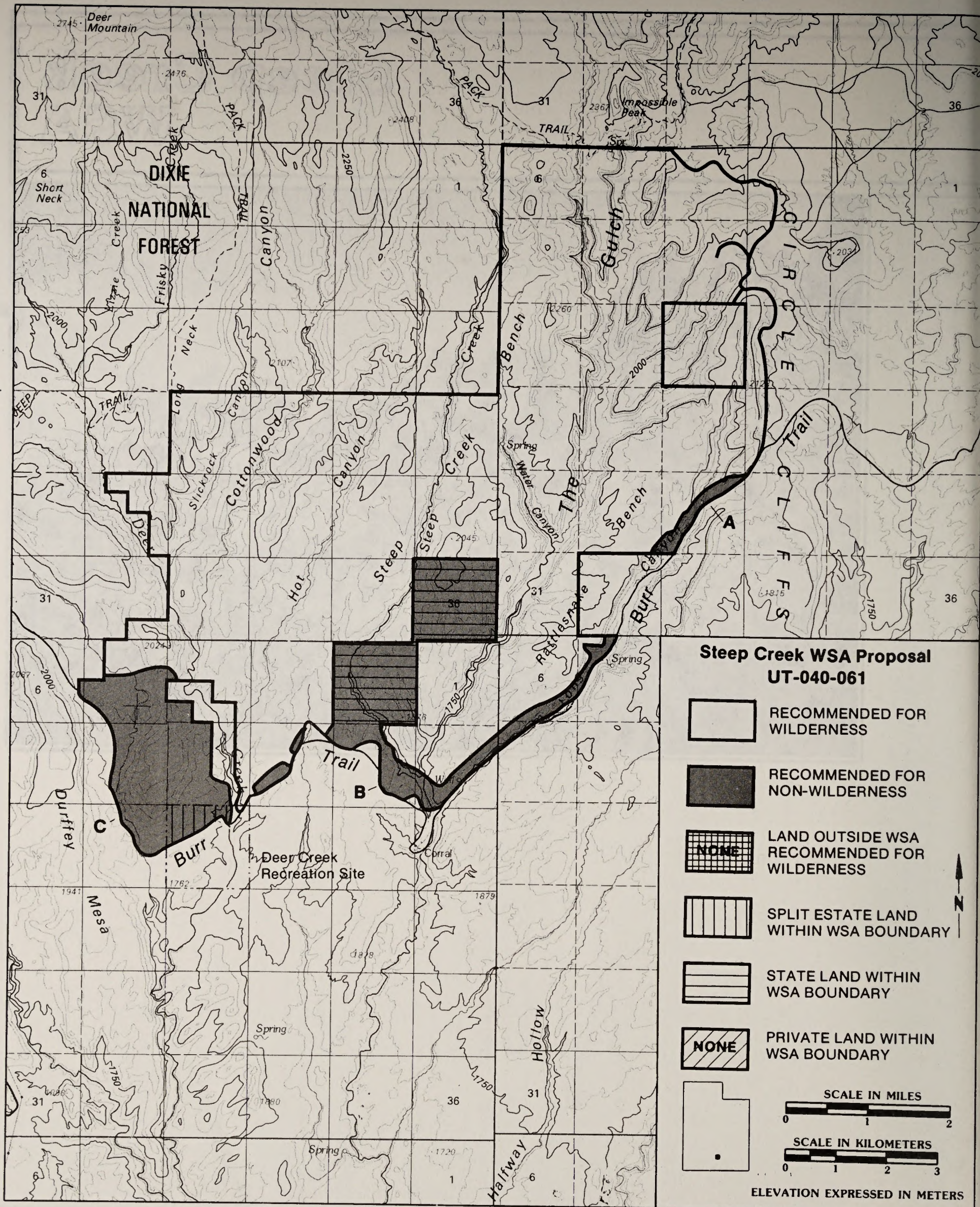
STEEP CREEK WSA

R. 5 E.

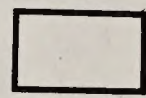

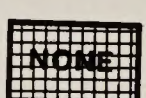
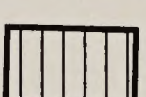
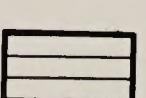
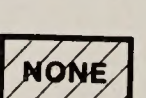
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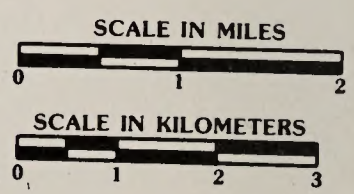
T. 33 S.

T. 34 S.



Steep Creek WSA Proposal UT-040-061

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE
LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  NONE
PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS

STEEP CREEK WILDERNESS STUDY AREA

1. THE STUDY AREA: 21,896 acres

The Steep Creek Wilderness Study Area (WSA) (UT-040-061) is in eastern Garfield County, about 3 miles east of Boulder, Utah (population 130). The study area is about 9 miles from north to south and 8 miles wide, from east to west. The WSA adjoins the Dixie National Forest on the north. It is bounded on the southwest, south, and southeast by the Burr Trail Road. The western boundary is formed by the Dixie National Forest and private lands. The easternmost boundary is at the edge of the disturbances and human imprints created by past uranium activities in the Circle Cliffs. The WSA is separated from the North Escalante Canyons/The Gulch Instant Study Area (ISA) by the Burr Trail Road (see Map).

The WSA contains 21,896 acres of public land administered by the Bureau of Land Management (BLM). Three sections (1,907 acres) of State land are inheld in the WSA. None of the inheld lands would be included in the portion recommended for wilderness designation (see Table 1).

The WSA consists of five parallel, south-trending canyons separated by benches. Numerous winding side canyons and steep cliffs isolate the benches. Fifteen miles of perennial streams flow in the WSA and 14.5 miles would be in the portion recommended for wilderness designation. Elevations range from 5,600 feet where Steep Creek leaves the southwestern portion of the WSA to about 7,600 feet on top of the benches in the northeastern part of the WSA. The predominant vegetation is pinyon-juniper woodland.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	21,896
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	1,907
Total	23,803
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	20,806
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	20,806
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	1,090
Split-Estate	0
Total BLM land not recommended for wilderness	1,090
In-holdings (State, Private)	1,907

Source: BLM File Data

STEEP CREEK WILDERNESS STUDY AREA

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Four alternatives were analyzed in the EIS: a partial wilderness alternative where 20,806 acres would be designated as wilderness and the remaining 1,090 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; an all wilderness alternative; and a smaller partial wilderness alternative of 18,350 acres.

2. RECOMMENDATION AND RATIONALE:

- 20,806 acres
(recommended for wilderness)
- 1,090 acres
(recommended for nonwilderness)

The recommendation for this WSA is that 20,806 acres be designated as wilderness and the remaining 1,090 acres be released for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The portion of the WSA recommended for wilderness includes Slickrock, Cottonwood, Hot, Deer Creek, Steep Creek, Water, and The Gulch Canyons and intervening benches such as Rattlesnake and Steep Creek Benches. The recommended area includes the western escarpment of the Circle Cliffs and the north wall of Long Canyon. About 15,500 acres (74 percent) of the 20,806 acres recommended for wilderness have outstanding opportunities for solitude and 12,270 acres (83 percent) have outstanding opportunities for primitive recreation. The recommended portion includes all of the opportunities for solitude and 95 percent of the opportunities for primitive recreation found in the entire WSA. All of the WSA is in a natural state. Wilderness values in the recommended portion are considered to outweigh the low

potential mineral values and the potential for improvement of elk habitat.

The portion recommended for nonwilderness includes a transportation and utility corridor in Areas A and B along the Burr Trail road and includes Area C which lacks outstanding opportunities for primitive recreation and solitude. Nonwilderness in the Areas A and B corridor and in Area C would not adversely affect wilderness use values or significantly affect management in adjacent recommended portions of the WSA.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute where the evidence of man is substantially unnoticeable to the average visitor and where individual minor imprints of man exhibit no cumulative impact that is substantially noticeable. The scenery in the WSA is the most important influence upon the quality of the naturalness characteristic. The WSA includes scenic features such as the Circle Cliffs, The Gulch Canyon, the high domes south of Impossible Peak, and the Cottonwood-Slickrock Canyons area. All of these diverse scenic features contribute to a WSA with high quality natural conditions. The WSA is in an essentially natural condition. Imprints of human activity that remain in the WSA include 2.5 miles of vehicular ways, 2.7 miles of fence, and three existing rights-of-way. These imprints affected a total of 20 acres of the WSA, but they are not substantially noticeable in the WSA as a whole.

Less than 1 acre has been disturbed since 1980. This resulted from a private residential trespass with associated outbuildings and some landscaping which caused less than 1 acre of total disturbance. Upon consummation of due process concerning the trespass, the area will be reclaimed to a substantially unnoticeable condition or the immediate site exchanged, sold, or otherwise removed from Federal ownership. No additional impacts on naturalness have occurred in the WSA.

STEEP CREEK WILDERNESS STUDY AREA

B. Solitude

Approximately 15,500 acres (71 percent) of the WSA provide outstanding opportunities for solitude. The remaining 6,396 acres (29 percent) of the WSA does not meet this criterion. Opportunities for solitude are provided by both terrain and vegetative screening. Neither the size nor the configuration of this WSA enhance or detract from the outstanding opportunities for solitude in the WSA.

Because of terrain and vegetative cover, visitors can find secluded spots throughout the WSA. The opportunities for solitude in the deep, winding canyons with riparian vegetation are outstanding.

Some benches in the WSA, such as Rattlesnake Bench and East Steep Creek Bench, provide opportunities for solitude because they are isolated by steep cliffs. The quality of the opportunity for solitude on the benches depends on the degree of isolation from the surrounding canyon walls and the amount that the benches are dissected by erosion.

Outstanding opportunities for solitude exist throughout the western portion of the WSA because the canyons are entrenched and winding, with alcoves, narrow side canyons, and dense growths of riparian vegetation.

In the lower Hot Canyon drainage, the landscape is relatively undifferentiated and has little relief and a moderate pinyon-juniper cover. The opportunity for solitude is less than outstanding in this area. In the extreme southwestern portion of the WSA, an almost detached area includes a 600-foot slickrock mesa surrounded by scattered pinyon-juniper and Ponderosa pine. This area also lacks the outstanding opportunity for solitude.

The sights and sounds of human activities are not generally evident within the WSA.

C. Primitive and Unconfined Recreation

Opportunities for hiking, backpacking, and horseback riding are outstanding on approximately 18,100 acres. Portions of the west Steep Creek Bench, and most of

Long Canyon lack these outstanding activity opportunities.

Backpacking, hiking, and horseback riding are of exceptional quality in this WSA. Each of the major canyons in the WSA intersects the Burr Trail Road, thus hiking and horseback riding opportunities are accessible in each canyon. The presence of a road nearby also enhances opportunities for backpacking, as overnight loop trips in different canyons and on the benches can be conducted from the same staging area along the road. The Gulch is an exception because access to its benches is very difficult.

Although BLM policy does not consider the availability of water to be a constraint upon wilderness recreation, water sources are a convenience to backpackers on extended trips. In the case of extended horseback trips, the availability of water often determines whether this activity could occur at all. Because of the availability of water in the Steep Creek WSA, backpacking is enhanced and horse packing is possible. The limiting factor to horseback activities is difficult terrain rather than water. Most of the WSA, other than several benches east of The Gulch, is accessible to horses.

All of the canyons and many bench areas in the WSA are highly scenic. The portion of The Gulch Canyon within the WSA is one of the important backpacking destinations on the Escalante River drainage because of the impressive scenery of this section of The Gulch. Because seven individual canyons are in the WSA, there are many optional routes available to hikers and riders. This repetitive canyon-and-bench configuration increases both the visitor capacity and diversity of foot and horseback experiences within the WSA.

In general, the WSA is of uniformly high scenic quality, and the same areas conducive to hiking, backpacking, and horseback opportunities are also excellent for photography and sightseeing. The Gulch, Water Canyon, Egg Canyon, Upper Long Canyon and the Circle Cliffs, Lamanite Natural Bridge and its canyon, the Upper Steep Creek-The Gulch divide, and the Slickrock Canyon-Cottonwood Canyon-Upper Hot Canyon all provide

STEEP CREEK WILDERNESS STUDY AREA

excellent opportunities for photography and sightseeing.

Rockhounding opportunities for the well-known Circle Cliffs petrified wood is limited to the northeastern portion of the WSA where the Chinle Formation is exposed. Approximately 2,300 acres contain exposed Chinle strata.

D. Special Features

Scenic values are directly related to the geological features of the WSA. In a large portion of the Steep Creek WSA, landscapes are distinctive to the degree that they are easily identified as types. The Circle Cliffs landscape type is found in the northeastern portion of the WSA. This is the best known and recognized landscape in the WSA. Within the WSA, the upper end of The Gulch, Egg Canyon, an unnamed canyon south of Egg Canyon, and the upper end of Long Canyon have attributes typical of this landscape. The landscape type also extends south along the western Circle Cliffs escarpment to Big Bown Bench and is not therefore confined to the WSA. Characteristic features include the intensively colored red, orange, and purple Chinle mounds and ledges at the base of Wingate Sandstone cliffs; vertically jointed cliffs banded with red, yellow, and white colors; and bench tops and upper cliff faces possessing innumerable orange-red Kayenta Sandstone knobs. This is one of the most spectacular and distinctive landscapes on the Colorado Plateau.

The section of The Gulch in the WSA is different from The Gulch downstream in The Gulch Outstanding Natural Area. In the WSA, The Gulch is a deep trench in sheer red sandstone walls. The canyon does not meander and the straightline visual effect is broken only by tributary canyons. The lower two-thirds of the Long Canyon tributary also has these attributes. The drainage divide between the upper ends of Steep Creek and The Gulch is a series of high ridges and slickrock peaks. The ridges drop fairly abruptly to the canyons below. The peaks resemble the adjacent Impossible Peak area on the Dixie National Forest. Slickrock domes on the Steep Creek side of the divide have alcoves and are heavily forested. The Gulch side of the di-

vide is cut deeply by an unnamed canyon containing Lamanite Natural Bridge.

Much of the Steep Creek-Steep Creek Bench area is a distinct landscape type within the WSA, characterized by the straight, shallow Steep Creek Canyon and relatively flat, unbroken benches covered with pinyon and juniper on either side of Steep Creek. This landscape lacks colorful rock strata and offers little of scenic value.

The remaining landscape type is the slickrock and canyons complex in the western portion of the WSA. Canyons tributary to Deer Creek, including terraces, are characteristic of the predominantly white sandstone. Distinct benches between the streams are absent. The concentration of canyons, slickrock formations, and large areas of exposed rock are esthetic elements that contribute to the scenery in this section of the WSA.

The Steep Creek WSA includes several features with scenic value. Lamanite Natural Bridge is actually a large, symmetrical arch in a deep side canyon tributary to The Gulch. The upper Gulch-Circle Cliffs area contains large, unbroken logs of petrified wood. The scenic value of these logs is enhanced by their colorful surroundings. In total, approximately 15,000 acres have scenic special features and values. Within the portion recommended for wilderness designation, approximately 19,100 acres (87 percent) are rated as Class A scenic quality under the BLM visual management system.

The WSA has populations of cougar and elk. Peregrine falcons and bald eagles, listed as endangered species, may occasionally use the WSA.

Seven other animal species and eight plant species that are considered sensitive occur or may occur in the WSA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

STEEP CREEK WILDERNESS STUDY AREA

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a potential natural vegetation (PNV) ecosystem not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is entirely juniper-pinyon woodland (21,896 acres). The PNV in the WSA is represented in the NWPS both nationally and in Utah and in other BLM study areas both in and outside of Utah. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation Within a Days Driving Time 5 Hours of Major Population Centers

The WSA is not within a 5-hour drive of any major population centers.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,121,209
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,684,302

Source: BLM File Data.

C. Balancing the Geographic Distribution of Wilderness Areas

The Steep Creek WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January 1987, the NWPS included 64 areas totaling 2,834,115 acres in Utah and Arizona.

There are seven designated wilderness areas within 100 miles of the WSA.

In a clockwise direction beginning to the north are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 45,000-acre Dark Canyon Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness

(FS), and the 7,000-acre Ashdown Gorge Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

The portion of the WSA that is recommended for wilderness designation can be managed as wilderness to preserve the values now present in the area. There are 2,532 acres in a post-FLPMA oil and gas in the recommended area. However, this lease is subject to nonimpairment of wilderness values and likely will expire and not be renewed. There are 440 acres of mining claims in the recommended area. It is projected that a portion of these and future claims existing at the time of designation would be disturbed for exploration purposes. Wilderness management would be further complicated by the presence of

STEEP CREEK WILDERNESS STUDY AREA

three sections of State land that would be cherry-stemmed from the wilderness area. Because of uranium potential in the vicinity of the WSA, there will likely be some mineral activity on these lands that would detract from wilderness values in the adjacent wilderness.

Livestock grazing and maintenance of existing rangeland facilities would continue and would not significantly affect wilderness values. Other resource and land use conflicts are not now a problem in the portion recommended for designation and are not anticipated to be so in the future.

In areas A and B that are not recommended for designation, management to effectively preserve wilderness character would be difficult. Development of scenic overlooks, the Deer Creek campground, and backpacker trailheads with parking and overnight facilities along the Burr Trail Road would effectively preclude Areas A and B and much of Area C from being managed to preserve wilderness character. Area C is also isolated by private lands and rights-of-ways from the remainder of the WSA. As an isolated area, Area C would be administratively difficult to independently manage to preserve wilderness character.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) studied the 20,806 acres recommended for wilderness designation and prepared a mineral assessment report for the Steep Creek WSA (USGS Bulletin 1747-B, Susan Bartsch-Winkler, et al., 1988). The report indicates that inferred subeconomic resources of bentonite and of decorative and dimension stone are present in the portion of the WSA that was studied. Petrified wood is also present, but it does not constitute a resource. The mineral resource potential for undiscovered bentonite, oil, gas, and carbon dioxide is moderate throughout the area that was studied, and is moderate for undiscovered uranium in the northeastern part of the area but is unknown in the western part of the area. The mineral resource potential for undiscovered iron, cobalt, nickel, copper, lead, molybdenum, tin, cadmium, strontium, and vanadium is low, as is the potential for

geothermal energy. There is no potential for undiscovered gypsum resources.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 70 inputs specifically addressing this WSA were received from 385 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statement by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 68 commenters supported wilderness designation for part or all of the WSA, while 311 were opposed. Six commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the need to protect wilderness values in the WSA and to complement proposed wilderness in the Glen Canyon National Recreation Area. The majority of those commenting in favor of wilderness were from other states.

Those opposing wilderness were concerned that wilderness would conflict with or preclude mineral exploration and development, livestock operations, flood con-

STEEP CREEK WILDERNESS STUDY AREA

trol and water rights, public access, or other uses; is not compatible with multiple use; would harm State and local economies; and that designation is not necessary to protect the WSA. The great majority of those opposed were from rural Utah.

Two Federal agencies, the FS and USBM commented on the Draft EIS. The FS stated that the Dixie National Forest concurs with the proposed wilderness recommendation. The USBM did not take a position regarding designation or non-designation but commented that BLM had understated the petroleum potential of the WSA. The USBM also commented that the BLM's Final EIS should include the findings of the USGS and USBM mineral investigations and those findings would be available in November 1988. The findings have been incorporated into the EIS and study report.

No comment letters were received on the Final EIS.

There are three sections (1,907 acres) of State land in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State considers the WSA to have moderately high wilderness values and moderately low conflicts. Conflicts include potential uranium resources and vegetation manipulation to reduce the problem of Boulder Mountain elk migrating to graze on ranch lands in and around the town of Boulder. The State believes that uranium potential requires further analysis. The State of Utah recommended that the transportation corridor along the Burr Trail Road be sufficiently wide, at a minimum of a 0.25 mile, to accommodate planned future upgrading and maintenance.

The Garfield County Commission is opposed to wilderness designation of the Steep Creek WSA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. Garfield County previously proposed to the Utah Congressional Delegation that 111,053 acres of BLM lands in three WSAs, including 18,350 acres of the Steep Creek WSA, and 31,600 acres in one

FS unit in the County be recommended as wilderness. The Garfield County Master Plan recommends that the remaining lands in the County, including 3,546 acres of the WSA, be retained for multiple uses.

In commenting on the Draft EIS the County noted that only 250 acres of the WSA would be disturbed if it is not designated wilderness, and nondesignation would continue the possibility of developing oil, natural gas, and uranium. Land treatments to improve elk habitat would also be allowed, to reduce impacts to private fields near Boulder.

STEEP CREEK WSA

Table 3
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives		
	Recommendation Large Partial Wilderness (20,806 Acres)	No Action/No Wilderness	All Wilderness (21,896 Acres)
Impacts on Wilderness Values	<p>The best wilderness values would be preserved overall in the designated area involving approximately 95 percent of the WSA. Naturalness and opportunities for solitude and primitive recreation would be directly lost on 28 acres and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to an additional 876 acres of the WSA. Most of the impact would be in the nondesignated area. Special features including scenic features, endangered and sensitive species, wildlife associated with wilderness, and perennial streams would be preserved overall. Some Class A scenery could be reduced in quality in the disturbed areas. Vehicular use of 1 mile of way as well as new mining roads in the nondesignated portion would continue to be an occasional annoyance that would detract from opportunities for solitude and primitive recreation in the WSA.</p>	<p>Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 32 acres and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to an additional 1,314 acres of the WSA. This impact would be due to mineral exploration, access to State in-held lands, and improvement of the Burr Trail. Special features including scenic features, endangered and sensitive species, wildlife associated with wilderness, and perennial streams would not significantly be affected. Class A scenery would be reduced in quality in the disturbed areas. Vehicular use of 2.5 miles of way and future mining roads would be an occasional annoyance that would detract from opportunities for solitude and primitive recreation in the WSA.</p>	<p>Wilderness designation would preserve overall the wilderness values in the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 28 acres and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to an additional 876 acres of the WSA. This impact would be due to mineral exploration, access to State in-held lands, and improvement of the Burr Trail. Special features including scenic features, endangered and sensitive species, wildlife associated with wilderness and perennial streams would be preserved overall. Class A scenery would be reduced in quality where disturbance occurs. Vehicular use of 1 mile of way as well as new mining roads in the nondesignated areas would be an occasional annoyance that would detract from opportunities for solitude and primitive recreation in the WSA.</p>
	Small Partial Wilderness (18,350 Acres)		

STEEP CREEK WSA

Table 3 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
Issue Topic	Recommendation Large Partial Wilderness (20,806 Acres)	No Action/No Wilderness	All Wilderness (21,896 Acres)	Small Partial Wilderness (18,350 Acres)
Impacts on Water Resources	The impacts and conclusions on water would be essentially the same as with the All Wilderness Alternative because the level of surface disturbance would be the same and the perennial streams would pass through the designated area.	The No Action/No Wilderness Alternative would not alter present or future water quality or uses because projected surface disturbance would be minor (32 acres) and would not significantly increase sediment yield and water could be utilized without consideration of wilderness values.	In the short term, wilderness designation would not significantly alter water quality or uses. In the long term, future water diversions and new and consumptive uses in the Escalante River system upstream of the WSA may be restricted or precluded in order to protect resource values in the wilderness.	The impacts and conclusions on water would be essentially the same as with the All Wilderness Alternative because the level of surface disturbance would be approximately the same and the perennial streams would pass through the designated areas.
Impact on Mineral and Energy Exploration and Production	Within the designated area, potential exploration opportunities for locatable minerals would be limited to claims existing at the time of designation. No significant minerals production would be foregone because the probability of development is low even if the WSA is not designated wilderness.	Implementation of the No Action/No Wilderness Alternative would not adversely affect mineral and energy resource exploration and production in the Steep Creek WSA because minerals could be leased, claimed and developed as at present.	Wilderness designation would limit potential exploration opportunities for locatable minerals to those under valid mining claims at the time of designation. No significant mineral production would be foregone because the probability of development is low even if the WSA is not designated wilderness.	Mineral exploration would not be limited in the area considered to possess the most potential for locatable minerals. No significant impacts would occur to mineral and energy resource exploration and production because the probability of development is low even if the WSA is not designated wilderness.

STEEP CREEK WSA

Table 3 (Continued)
Comparative Summary of Impacts by Alternative

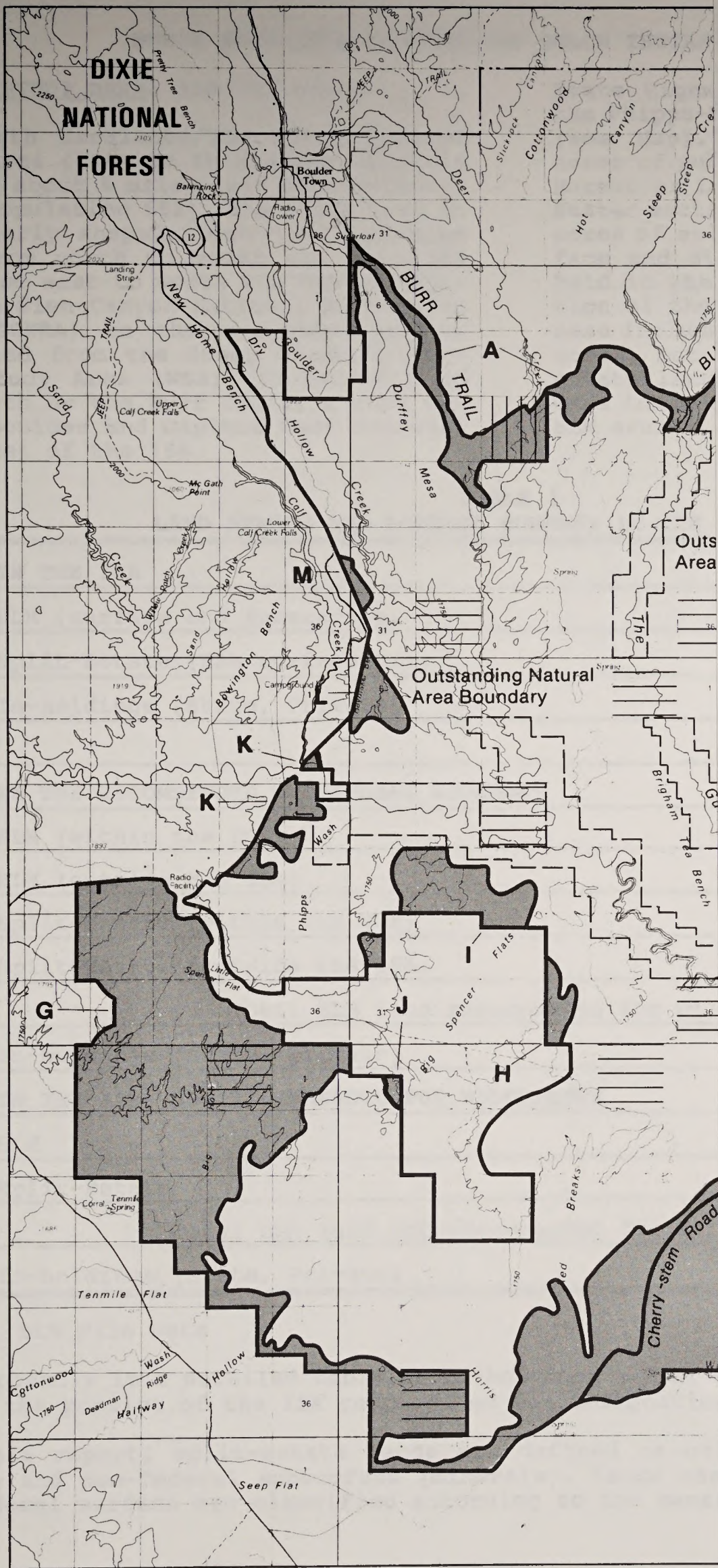
		Alternatives		
Issue Topic	Recommendation Large Partial Wilderness (20,806 Acres)	No Action/No Wilderness	All Wilderness (21,896 Acres)	Small Partial Wilderness (18,350 Acres)
Impacts on Wildlife Habitat and Populations	The impacts and conclusions with this alternative are essentially the same as those with the All Wilderness Alternative. The partial designation would preclude the opportunities to improve needed habitat on elk winter range. Designation would protect all species with additional solitude on 95 percent (20,806 acres) of the WSA. There would be no significant impacts to special status species because of required mitigation and because habitat in the WSA would be disturbed.	There would be no significant impacts to wildlife habitat or populations including special status animal species because only 0.15 percent (32 acres) of the habitat in the WSA would be disturbed.	Wilderness designation would preclude the opportunity to improve needed habitat on elk winter range. Designation would protect all species and provide additional solitude. There would be no significant impacts to special status species because required mitigation and because only 0.13 percent (28 acres) of the habitat in the WSA would be disturbed.	Partial wilderness designation with this alternative would preclude the opportunity to improve needed habitat on elk winter range. Designation would protect all species with additional solitude on 83 percent (18,174 acres) of the WSA. There would be no significant impacts to special status species because of required mitigation and because only 0.15 percent (32 acres) of the habitat in the WSA would be disturbed.

NORTH ESCALANTE

North Escalante Canyons/ The Gulch ISA



NORTH ESCALANTE CANYON



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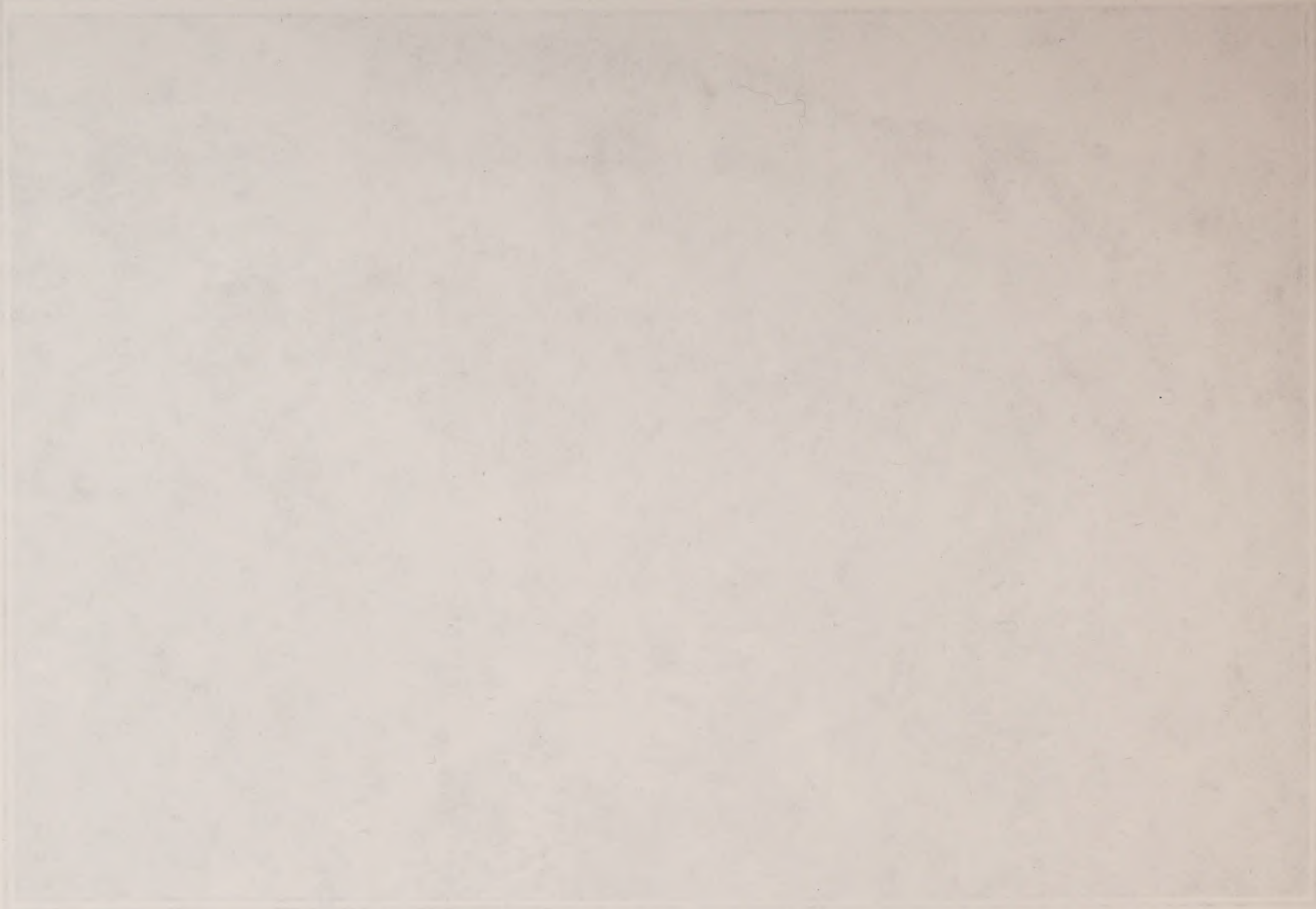
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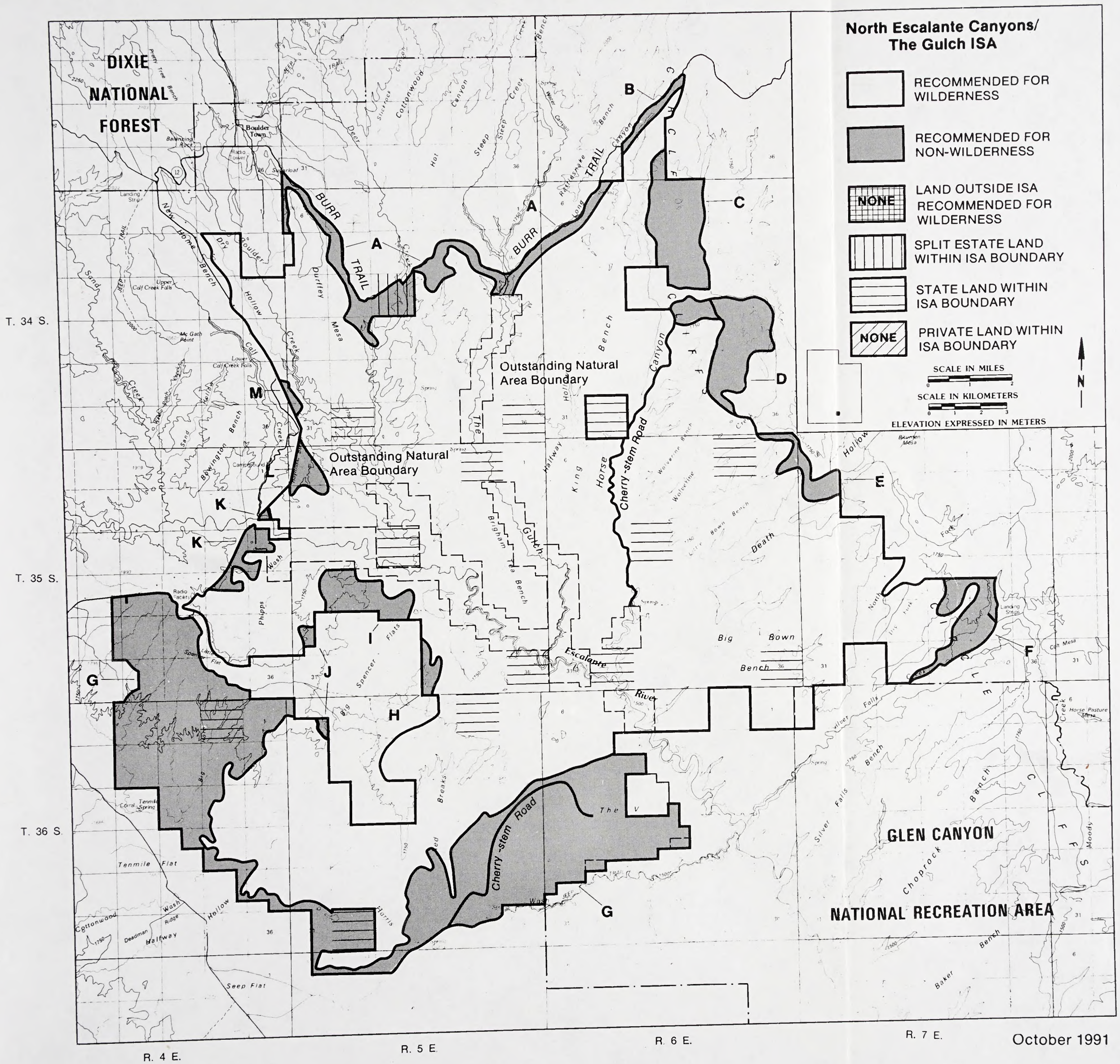
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North Carolina - Canyons
1871



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NORTH ESCALANTE CANYONS/THE GULCH ISA



NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

1. THE STUDY AREA: 119,752 acres

The North Escalante/The Gulch Instant Study Area (ISA) is in eastern Garfield County, about 5 miles east of Escalante, Utah (population 652). The study area is irregularly shaped, more than 20 miles long from north to south and 20 miles wide from east to west. The ISA is adjacent to Glen Canyon National Recreation Area (GCNRA) to the southeast and is separated from the Steep Creek Wilderness Study Area (WSA) (UT-040-061) on the north by the Burr Trail, a road between Boulder and Capitol Reef National Park east of the ISA.

State Highway 12 divides the ISA from the Phipps-Death Hollow ISA, to the west (see Map). The ISA contains 119,752 acres of public land administered by the Bureau of Land Management (BLM). Twelve State sections (7,623 acres) and 452 acres of split-estate land (Federal surface and State-owned minerals) are in-hold in the ISA (see Table 1). The portion of the ISA recommended for wilderness includes nine State sections (5,701 acres) but does not include the split-estate lands (see Appendix). The study area includes eight specially designated BLM areas totaling 13,195 acres.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN THE ISA	ACRES
BLM (surface and subsurface)	119,752
Split-Estate (BLM surface only) ^b	452
In-holdings (State, Private)	7,623
Total	127,827
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the ISA)	91,558
BLM (outside the ISA)	0
Split-Estate (within the ISA)	0
Split-Estate (outside the ISA)	0
Total BLM land recommended for wilderness	91,558
In-holdings (State, private)	5,701
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	28,194
Split-Estate	452
Total BLM land not recommended for wilderness	28,646
In-holdings (State, Private)	1,922

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings and/or split-estate tracts included within the portion of the ISA recommended for designation.

^b In this report, split-estate lands are defined as only those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface are classified according to the owner of the surface.

NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

Most of the ISA is characterized by plateaus or benches and canyons. The Escalante River has cut a deep, winding canyon from west to east through the ISA. Elevations range from about 4,800 feet on the Escalante River at the southeast corner of the ISA to about 6,800 feet atop King Bench in the northeastern part of the study area. Pinyon-juniper is the most common vegetative type, but about 20 percent of the ISA is barren or has sparse vegetative cover.

The ISA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Four alternatives were analyzed in the EIS: a partial wilderness alternative where 91,558 acres would be designated as wilderness and 28,194 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; a smaller partial wilderness alternative of 54,500 acres; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

91,558 acres

(recommended for wilderness)

28,194 acres

(recommended for nonwilderness)

The recommendation for this ISA is to designate 91,558 acres as wilderness and to release the remaining 28,194 acres for uses other than wilderness (see Map). Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

All of the ISA is in a natural state. Approximately 89 percent of the outstanding opportunities for solitude in the ISA are included within the recommended area. Approximately 91 percent of the ISA's outstanding opportunities for primitive recreation are in the area recommended for designation. About 11 percent (10,082 acres) of the area rec-

ommended for wilderness was identified in 1970 as part or all of four BLM Outstanding Natural Areas (ONAs). About 22 percent of the entire ISA has been closed to off-road vehicle (ORV) use. All of the major canyon and bench systems tributary to the Escalante River are recommended for wilderness. Canyons include Boulder Creek, Deer Creek, The Gulch, Wolverine Canyon, Little Death Hollow, Harris Wash and Phipps Wash. Major benches and upland areas include King Bench, Brigham Tea Bench, Durffey Mesa, Wolverine Bench, Little Bown Bench, Big Bown Bench, the Red Breaks, and the Bighorn. Other important features included in the recommended portion are the western escarpment of the Circle Cliffs and the mainstem Escalante River and its canyon. Within the area recommended for designation, wilderness values outweigh mineral or other competing values.

Areas not recommended for designation as wilderness are along the perimeters of the ISA. Areas A and B along the northern Burr Tail Road boundary are not recommended for designation in order to preserve development options for transportation, utility, campground, and scenic overlooks and to allow for backpacker parking and trailhead access to the backcountry of the area recommended for designation. Trailhead parking for the heavily used Deer Creek and The Gulch backpacking routes to the Escalante River are adjacent to the Burr Trail Road.

Other areas not recommended for designation possess opportunities for solitude and primitive recreation that generally are not comparable to the outstanding opportunities found in the area recommended for designation. Less than 15 percent of the nonwilderness perimeter areas exhibits outstanding opportunities. Approximately 90 percent of both the solitude and primitive recreation opportunities in the recommended area are considered by the wilderness inventory to be of outstanding quality.

Areas C, D, E, and F along the eastern perimeter of the ISA are all east of the Circle Cliffs escarpment and the rugged benches behind that escarpment. These four areas are flatter, more open and less spectacular than the recommended

NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

area immediately to the west. In addition, there are some intrusions from previous uranium exploration, although the areas meet the inventory criteria for naturalness.

Area G along the southern and western perimeter includes the V flat and the upper portion of Harris Wash lacking canyon entrenchment. The Area G locations are not comparable to the Harris Wash Canyon, the Bighorn, the Red Breaks, and the spectacular slickrock domes above the Escalante River that form the Area G boundary to the recommended portion. Areas H, I, and J are extensions of the Big Spencer Flats located outside on the ISA boundary. These portions of Big Spencer Flats abut the scenic canyons and slickrock areas within the recommended area such as Phipps Wash, the Escalante river, and the unnamed slickrock domes above the river.

Areas K, L, and M are the flat areas along Utah Scenic Byway 12 and are adjacent to areas in the recommended portion of the ISA such as the Escalante River Canyon, the Phipps Wash Canyon, Phipps Arch, and the slickrock rim areas of the Dry Hollow Canyon fork of the Boulder Creek Canyon. Almost all such available flat areas along Scenic Byway 12 are used for informal parking by tourist sightseers, hikers, and backpackers to the Phipps-Death Hollow and North Escalante Canyons/The Gulch ISAs. Area K is critical to the provision of trailhead parking and overnight facilities for backpackers entering the ISA on the Escalante River and Phipps Wash Canyons routes. Areas K, L, and M are recommended for nondesignation to insure that the adjacent portion recommended for wilderness can be accessed by wilderness users and safely viewed as wilderness by sightseers.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man ex-

hibit no cumulative impact that is substantially noticeable. The ISA represents the largest block of undisturbed BLM lands on the midsection of the Escalante River Canyons system and along the western rim of the Circle Cliffs. Because the canyons system is extensive and well-watered, it has a high utility for hiking and overnight backpacking. Most of the naturalness attributes of the ISA are accessible to and visited by backcountry users. The naturalness characteristic is of very high quality and is enhanced by the high scenic values. The imprints of man which remain within the ISA are visible in less than 1 percent of the ISA. They include 5 miles of ways, four cabins with corrals, and numerous livestock improvements. Approximately 600 acres show evidence of man's imprints.

Since 1980, approximately 1 to 2 acres of the ISA has been disturbed. This disturbance resulted from two actions: (1) the construction of the Big Horn/Upper Cattle division fence during 1984. This project consists of three separate fences of 200-foot, 3,000-foot and 3,400-foot lengths. The fences are substantially unnoticeable and do not impair the wilderness values, and (2) construction of 600 feet of irrigation pipeline onto private land during 1984. Both construction projects have been reclaimed so that impacts are substantially unnoticeable. No additional imprints have occurred in the ISA.

B. Solitude

Approximately 75 percent of the ISA has outstanding opportunities for solitude. The terrain and vegetation enables visitors to find seclusion in most of the ISA. The size of the ISA enhances opportunities for solitude. The configuration of the ISA neither enhances nor detracts from the opportunities for solitude.

A sense of isolation in all of the major canyons provides an outstanding opportunity for solitude. The canyons vary considerably in shape and appearance. Some canyons, such as the Escalante River, Phipps Wash, and Horse Canyon, have vertical walls and many bends and meanders. Other canyons, such as The Gulch, Harris Wash, and upper Deer Creek have more rounded walls with numerous bends.

NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

Boulder Creek, Dry Hollow, and lower Deer Creek are deep V-shaped canyons. The confluence area of Boulder and Deer Creek is one of the most convoluted and dissected sandstone areas in the ISA. Lower Wolverine Canyon and Little Death Hollow are entrenched meanders with sections of narrows. All of these features provide screening that isolates visitors from each other. Vegetative screening enhances the opportunity for solitude in the Boulder Creek, Dry Fork, lower Deer Creek, and The Gulch Canyons. The Escalante River Canyon also possess vegetative screening.

The exceptions, when canyons do not offer outstanding opportunities for solitude, are the upper ends of Horse Canyon, Wolverine Canyon, Little Death Hollow, and Silver Falls Canyon as they emerge from the Circle Cliffs. At this point, these canyons are broad open valleys between buttes and, consequently, do not provide screening.

The larger benches in the ISA such as King Bench, Big Bown Bench, Little Bown Bench, Brigham Tea Bench, and Wolverine Bench are isolated by surrounding cliffs or canyons. Isolation is even more pronounced on the smaller mesas and benches such as Durffey Mesa, Red Breaks, and the mesas east of Big Horn. Many of the benches possess rough or dissected interiors that offer excellent topographic screening. Wolverine Bench, Little Bown Bench, the Upper Halfway Hollow section of King Bench, and the eastern end of Big Bown Bench are examples. Some areas in the interiors of the three largest benches (Brigham Tea, King, and Big Bown Benches) are open and flat and provide a less than outstanding opportunity for solitude.

Other landforms within the ISA cannot be classified as benches or canyons. These areas include the "V" Flat, the dissected sandstone area between the upper Gulch and Deer Creek, the massive sandstone outcrops northeast of the Red Breaks, and the Chinle exposures at the bottom of the Circle Cliffs. With the exception of the "V" and the Chinle slopes, these areas all provide outstanding opportunities for solitude due to screening by terrain. In the "V", topographic screening is effective only in the small scattered slickrock areas,

and on the Chinle slopes, only in the more dissected and gullied areas at the base of the Circle Cliffs.

Outside sights and sounds are an insignificant influence on solitude at present. It would be easy for a visitor to find seclusion in most of the canyons of the ISA. The user can also easily find seclusion on all but the interiors of the Brigham Tea, King, and Big Bown Benches of the ISA because of the isolating effect of the surrounding cliffs or canyons.

C. Primitive and Unconfined Recreation

The primitive recreation opportunities on 94,604 acres or 79 percent of the ISA meet the criterion for outstanding for lands under wilderness review.

The ISA has eight recreational opportunities of outstanding quality. It provides outstanding opportunities for activities such as camping, backpacking, hiking, horseback riding, photography, and sightseeing for geological, historical, and archaeological features. In general, the places where opportunities for camping, backpacking, hiking, horseback riding, photography, and sightseeing for geological, historical, and archaeological features are outstanding are all within the best backpacking areas.

Various intrinsic characteristics of the ISA enhance the opportunity for backpacking. The ISA contains a variety of superb scenery, many water sources conducive to extended trips and a riparian canyon vegetation which is a scenic feature not commonly found in the canyon country.

The configuration of the canyon system is a major factor influencing the quality of the backpacking. The canyons tributary to the central Escalante River Canyon form a dendritic pattern that provides a variety of routes to and from the river. Although the Escalante River and several other canyons are probably the major objectives of current backpacking use, the benches are also a destination. Several benches, such as King Bench, are sufficiently large to provide a backpacking experience of several nights' duration. Benches such as Little

NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

Bown and Big Bown provide scenery and solitude. Benches and certain other areas outside the canyons also can be used as travel routes to the Escalante River or between other canyons. Examples include the route across King Bench from The Gulch to Horse Canyon, the route across Big Bown Bench from Horse Canyon to either Silver Falls Canyon or the Escalante River, and the route from Big Spencer Flats to the Escalante River Canyon and Sheffield Bend.

Sightseeing for geological features is of excellent quality in the Wolverine Petrified Wood Natural Environment Area. This area is not considered outstanding for backpacking.

D. Special Features

The ISA is a large and geographically complex area associated with that section of the Escalante River Canyon between the Glen Canyon NRA and the highway between Boulder and Escalante, Utah. The area has some of the most outstanding scenery in the country. The scenic values are correlated to landforms in the ISA; to understand the quality of this special feature, the topographic character of the ISA should be understood.

East of Horse Canyon in the eastern portion of the ISA, canyons draining to Horse Canyon through the Circle Cliffs escarpment have created a unique canyon and bench system. Four canyons (Horse, Wolverine, Little Death Hollow, and Silver Falls) have isolated 10 benches of varying size including the named Wolverine, Little Bown, and Big Bown Benches. Wolverine Canyon and Little Death Hollow possess extremely narrow and convoluted sections, but the most distinctive topographic feature is the surface of the benches. Many of the bench tops exhibit an intricate pattern of innumerable orange-red Kayenta Sandstone knobs. The east face of King Bench also possesses this feature.

In the north-central portion of the ISA, another distinctive area of topographic character is evident. This area is dominated by King Bench, which is the largest bench in the ISA. The much smaller Brigham Tea Bench is also characteristic of the area. The Gulch ONA with its per-

ennial stream is located in the western portion of the area. King Bench is a rough isolated bench wholly within the ISA. For the most part, King Bench and Brigham Tea Bench lack the extensive Navajo or Kayenta Sandstone Formations and exposures characteristic of other sections of the ISA.

The northwestern section is an extremely dissected rugged area. It includes the canyons of the Escalante River, Deer Creek, Dry Hollow, and Boulder Creek. Durffey Mesa is a prominent isolated mesa which, in places, rises 600 feet above Deer Creek and Boulder Creek. With the exception of portions of Haymaker Bench, most of this section is characterized by a yellow-white Navajo Sandstone exposed as cliffs, domes, and canyon walls.

Several distinctive landforms surround Big Spencer Flats in the southwestern portion of the ISA. The Phipps Wash area contains Phipps Wash Canyon draining to the Escalante River and benches with extensive rock outcropping on either side of the canyon.

The Harris Wash area southwest of Big Spencer Flats contains the canyon of Harris Wash and several tributary canyons such as Big Horn, draining Big and Little Spencer Flats. South of Big Spencer Flats, the area changes to a rough sand and slickrock region cut by short canyons. Large sand dunes are present below the small, isolated buttes east of Big Horn. Navajo Sandstone domes and peaks are present in this area. Harris Wash is a canyon of the classic Escalante River drainage canyon form with many entrenched meanders in the Navajo Sandstone.

The Red Breaks southeast of Big Spencer Flats is a colorful dissected area in the Carmel Formation. The Red Breaks are bounded on the west by a Navajo Sandstone escarpment. A large canyon draining to Harris Wash bisects the Red Breaks and cuts into the underlying Navajo Sandstone. To the northeast, the Red Breaks are replaced by one of the most extensive Navajo Sandstone areas in the ISA. The Navajo forms massive domes, peaks, and mesas and extends to the rim of the Escalante River Canyon. From the mouth of Boulder Creek to The Gulch,

NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

several short side canyons enter the river from this sandstone area.

The Navajo Sandstone area and the Red Breaks are bounded on the east by the "V" flat created by the intersection of the Harris Wash and Escalante River Canyons.

The "V" lacks relief and is characterized by a patchwork pattern of open sandy soil areas and slickrock. Several sand dune areas are present. In total, approximately 81,000 acres of the ISA possess scenic values of significance.

The ISA possesses numerous archaeological sites. A historical site of significance is the Old Boulder Road, which was the main route between Escalante and Boulder, Utah.

The ISA has resource values that, although not identified as such during the wilderness inventory, could be considered special features. There are two animal species (peregrine falcon and bald eagle) listed as endangered that may occasionally use the ISA.

There are seven animal species and nine plant species that are considered sensitive that may occur in the ISA. The ISA has small populations of cougar and elk which are wildlife species associated with wilderness.

Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information. Approximately 43 percent (51,752 acres) of the ISA is rated Class A for scenic quality. It has approximately 42.4 miles of perennial streams.

The Escalante River through the ISA is part of a longer segment nominated for study under Section 5(d) of the Wild and Scenic Rivers Act of 1968 by the Secretaries of the Interior and Agriculture on September 11, 1970. There are four arches found in the ISA.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this ISA would add a combination of potential natural vegetation (PNV) ecosystems not presently represented in Utah or in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference. It is not necessarily the vegetation that is currently present in an area.

The ISA is in the Colorado Plateau Province/Ecoregion. The PNV types in the ISA are juniper-pinyon woodland (79,192 acres), galleta-threeawn shrubsteppe (27,160 acres), and saltbush-greasewood (13,400 acres). Juniper-pinyon woodland and saltbush-greasewood are represented in the NWPS nationally and in Utah and in other BLM study areas both in and outside of Utah. Galleta-threeawn shrubsteppe is present in BLM study areas but is not represented in the NWPS.

Adding the North Escalante Canyons/The Gulch ISA Complex to the NWPS would expand the diversity of natural systems by adding a PNV type (galleta-threeawn shrubsteppe) and a combination of ecosystems not now represented in the NWPS.

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The ISA is not within a 5-hour drive of any major population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The North Escalante Canyons/The Gulch ISA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,064,813
Galleta-Threeawn Shrubsteppe	0	0	10	163,566
Saltbush-Greasewood	1	20,000	17	380,603
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,627,006
Galleta-Threeawn Shrubsteppe	0	0	10	163,566
Saltbush-Greasewood	1	20,000	17	380,603

Source: BLM File Data.

As of January 1987 the NWPS included 64 areas comprising 2,834,115 acres in Utah and Arizona. In a clockwise direction within 100 miles of the ISA, beginning to the north, are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 45,000-acre Dark Canyon Wilderness (FS), the 110,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), and to the northwest, the 7,000-acre Ashdown Gorge Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

The entire ISA, including the portion recommended for wilderness designation can reasonably be managed as wilderness to preserve values now present in the area. There are 12 sections (7,623 acres) of full-estate State land and 452 acres of split-estate land with Federal surface and State minerals in the ISA. Of these, nine sections (5,701 acres) are in the area recommended for wilderness. The remaining 1,921 acres of full-estate and all of the split-estate land are in the part of the ISA not recommended for wilderness designation.

All of the in-held State lands are under lease for grazing and 2,557 acres are leased for oil, gas, and hydrocarbons.

Grazing is presently the only use on in-held State land.

It is projected that in the foreseeable future only 6 acres of the ISA would be disturbed by construction of access to roads to State sections for mineral exploration purposes. Four of the 6 acres are in the recommended part of the ISA and 2 acres are in the part not recommended for wilderness. Development is not projected following exploration. Therefore, the presence of State lands would not significantly affect the overall manageability of the ISA.

There are approximately 26 existing mining claims in the recommended area and 40 in the area not recommended for wilderness designation. Limited exploration of these claims is projected in the foreseeable future but development is not expected.

There are approximately 8,600 acres of post-FLPMA and 4,280 acres of pre-FLPMA leases in the ISA. Of these, 6,820 acres of post-FLPMA and 3,380 acres of pre-FLPMA leases are in the part of the ISA recommended for wilderness. About 8,960 acres of the leases in the recommended part of the ISA are under combined hydrocarbon lease application. If

NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

granted, these leases would contain non-impairment stipulations limiting development to a manner not degrading to wilderness values. Development is not expected in the foreseeable future on any of the leases in the ISA.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) studied the mineral values of the ISA in 1981. The report indicated that locatable minerals such as uranium, copper, and gold may occur but in small, low-grade deposits. Oil and gas and gypsum deposits are also thought to be small or not viable for economic extraction (USGS Open File Report 81-558, 1981). Analysis of the area by BLM geologists indicated that the potential for oil and gas energy mineral resources is low. Wells drilled near the ISA have not had promising showings and the geologic structure of the ISA is not particularly favorable. The potential for coal reserves is low and the coal-bearing formations in the nearby Kaiparowits coal field are absent in the ISA. No hot springs are known in the area and regional subsurface heat flow is low. Consequently, the potential for geothermal resources is also low.

The potential for undiscovered uranium deposits is moderate. Part of the ISA is within an area considered to have high potential. The remainder of the study area is considered to be favorable for small deposits of uranium. As the occurrence of copper is usually associated with uranium mineralization, the ISA is considered to have moderate potential for small deposits of copper.

Gravel and other rock material usable in construction occur in the ISA, but these deposits are not unique nor economically significant because the ISA is not near centers of likely use and such materials exist elsewhere in the vicinity.

Impacts on Resources

Table 3 summarizes the effects on pertinent resources for alternatives considered including designation or non-designation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of ISA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the ISA.

During formal public review of the Draft EIS, a total of 178 inputs specifically addressing this ISA were received from 717 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statement by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 397 commenters supported wilderness designation for part or all of the ISA, while 311 commenters were opposed. Nine commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on adding the diversity in the ISA to the NWPS and the significance of wilderness protection. The majority of those commenting in favor of wilderness were from other states.

Those opposing wilderness were concerned that wilderness would conflict with or preclude mineral exploration and development, livestock operations, flood control and water rights, public access, or other uses; is not compatible with multiple use; would harm State and local economies; and that designation is not necessary to protect the ISA. The great majority of those opposed were from rural Utah.

NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

Two Federal agencies, the NPS and USBM commented on the Draft EIS. The USBM commented that BLM had understated the petroleum potential of the ISA. The NPS noted that it favored the All Wilderness Alternative for the ISA.

No comment letters were received on the Final EIS.

There are twelve sections (7,623 acres) of State land and 452 acres of split-estate land of Federal surface and State minerals in the ISA. In commenting on the Draft EIS the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the ISA. The State noted that the area possesses the highest of wilderness values because of the Escalante River system, but also has significant conflicts with mineral and livestock management.

The Garfield County Master Plan of 1984 recommends that 53,447 acres of the North Escalante Canyons/The Gulch ISA be designated wilderness. Regardless of the master plan, the Garfield County Commission is opposed to wilderness designation of the ISA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation for BLM lands in Utah.

NORTH ESCALANTE CANYON/THE GULCH ISA

Table 3
Comparative Summary of Impacts by Alternatives

Alternatives	
Resource	Recommendation
Impacts on Wilderness Values	<p>Large Partial Wilderness (91,558 Acres)</p> <p>Wilderness values would be preserved overall in the designated area which is approximately 76 percent of the ISA. Naturalness and opportunities for solitude and primitive recreation would be directly lost on 60 acres and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to an additional 7,185 acres of the ISA. The impact would be due to mineral exploration, providing access to State in-holdings, rangeland projects, improvement of the Burr Trail, and continued ORV use of the "V" and Spenser Flats areas. Most of the impact would be in the nondesignated area. Special features, including most of the scenic and geologic values, all perennial waters, and most archaeological and historical features, would be preserved in the designated area. Some Class A scenery would be reduced in quality by surface disturbance. Vehicular use of 1 mile of way and future access and exploration roads in the nondesignated portion would detract from opportunities for solitude and primitive recreation in the ISA. This alternative would complement and enhance wilderness uses, values, and management of the contiguous NRA.</p>
	<p>No Action/No Wilderness</p> <p>Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 104 acres of the ISA and opportunities for solitude and primitive recreation would be reduced in quality on up to an additional 11,975 acres. This impact would be due to mineral exploration, providing access the State in-holdings, rangeland projects, improvement of the Burr Trail and continued ORV use of the "V" and Spenser Flats areas. Some Class A scenery could be reduced in quality in disturbed areas. Also, over the long term, water flow in the Escalante River could change due to upstream appropriations. Vehicular use of 5 miles of existing ways and future access and exploration roads would occasionally detract from opportunities for solitude and primitive recreation in the ISA. This alternative would not complement and enhance wilderness values, uses, and management of the contiguous NRA which is proposed for wilderness designation by the NPS.</p>
	<p>All Wilderness (119,752 Acres)</p> <p>Wilderness designation would preserve overall the wilderness values in the ISA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 46 acres and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to an additional 3,593 acres. This impact would be due to mineral exploration, rangeland projects, and improvement of the Burr Trail. Special features including the wild and scenic qualities of the Escalante River would be preserved overall, although some Class A scenery might be reduced in quality because of disturbance. This alternative would complement and enhance wilderness uses, values, and management of the contiguous NRA which is proposed by the NPS for wilderness designation.</p>
	<p>Small Partial Wilderness (54,500 Acres)</p> <p>Wilderness values would be preserved overall in the designated area which is approximately 46 percent of the ISA. Naturalness and opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to an additional 7,185 acres of the ISA. The impact would be due to mineral exploration, providing access to State in-holdings, rangeland projects, improvement of the Burr Trail, and continued ORV use of the "V" and Spenser Flats areas. Almost all of the impact would be in the nondesignated area. Most special features including the Escalante River would be protected. Some Class A scenery could be reduced in quality. Vehicular use of 5 miles of existing ways and future access and exploration roads in the nondesignated portion would occasionally detract from opportunities for solitude and primitive recreation in the ISA. This alternative would not complement or enhance wilderness values, uses, and management of contiguous NRA lands proposed for wilderness designation by the NPS.</p>

NORTH ESCALANTE CANYON/THE GULCH ISA

**Table 3 (Continued)
Comparative Summary of Impacts by Alternatives**

Alternatives	
	Recommendation
Resource	<p>Large Partial Wilderness (91,558 Acres)</p>
Impacts on Vegetation	<p>Vegetation types would not be significantly affected by implementation of this alternative because of 0.05 percent of the ISA (60 acres) would be disturbed. There would not be significant impacts to special status plant populations from mineral access, BLM-initiated activities, Burr Trail realignment, or ORV use, because of required mitigation and continued monitoring and management actions.</p>
Impacts on Water Resources	<p>In the short term, this partial wilderness designation would not significantly alter water quality or uses. In the long term, future water diversions and new consumptive uses in the Escalante River system upstream of the ISA may be restricted or precluded.</p>
Resource	<p>No Action/No Wilderness</p>
Impacts on Vegetation	<p>Vegetation types would not be significantly affected by implementation of the No Action/No Wilderness Alternative because only 0.09 percent (104 acres) of the ISA would be disturbed. There would be no significant impacts to special status plant populations from mineral access, BLM-initiated activities, Burr Trail realignment, or ORV use because of required mitigation and continued monitoring and management actions.</p>
Impacts on Water Resources	<p>The No Action/No Wilderness Alternative would not significantly alter water quality because only 0.09 percent (104 acres) of the ISA would be disturbed and mitigation would be required. Present or future water uses would not be affected because water could be developed without consideration of wilderness values.</p>
Resource	<p>All Wilderness (119,752 Acres)</p>
Impacts on Vegetation	<p>Vegetation types and special status species would be protected because potential surface disturbance would be reduced to 46 acres.</p>
Impacts on Water Resources	<p>In the short term, wilderness designation would not significantly alter water quality or uses. In the long term, future water diversions and new consumptive uses in the Escalante River system upstream of the ISA may be restricted or precluded.</p>
Resource	<p>Small Partial Wilderness (54,500 Acres)</p>
Impacts on Vegetation	<p>The impacts for this alternative would be essentially the same as for the Large Partial Wilderness Alternative because the potential disturbance is only 2 acres more with this alternative and the same area would be available for ORV use.</p>
Impacts on Water Resources	<p>In the short term, this small partial wilderness designation would not significantly alter water quality or uses. In the long term, future water diversions and new consumptive uses in the Escalante River system upstream of the ISA may be restricted or precluded.</p>

NORTH ESCALANTE CANYON/THE GULCH ISA

**Table 3 (Continued)
Comparative Summary of Impacts by Alternatives**

		Alternatives		
Resource	Recommendation Large Partial Wilderness (91,558 Acres)	No Action/No Wilderness	All Wilderness (119,752 Acres)	Small Partial Wilderness (54,500 Acres)
Impacts on Mineral and Energy Exploration and Production	With this alternative partial wilderness would limit potential exploration and development opportunities for minerals that may occur in the designated portion (76 percent) of the ISA to those areas under lease or mining claim at the time of designation. However, no significant locatable or leasable mineral production would be foregone because there is a low probability of development even if a portion of the ISA is not designated wilderness.	Implementation of the No Action/No Wilderness Alternative would not limit energy and mineral exploration and development beyond the limitations which are already in effect. Mineral leasing, location of mining claims, and mineral development would continue as at present.	Wilderness designation would limit potential exploration and development opportunities for minerals that may occur in the ISA to those areas under lease or mining claim at the time of designation. However, no significant locatable or leasable mineral production would be foregone because there is a low probability of development even if the ISA is not designated wilderness.	With this alternative partial wilderness would limit potential exploration and development opportunities for minerals that may occur in the designated portion (46 percent) of the ISA to those areas under lease or mining claim at the time of designation. However, no significant locatable or leasable mineral production would be foregone because there is a low probability of development even if a portion of the ISA is not designated wilderness.
Impacts on Cultural Resources	Cultural resources including 43 recorded sites would receive protection from wilderness designation with this alternative. Sites in the nondesignated portion would continue to receive protection under existing laws but some inadvertent loss or damage to cultural sites due to locatable mineral exploration and ORV activity could occur. The likelihood of significant damage or loss is minimal.	Some impacts to cultural resources including 60 recorded sites would result with this alternative. Some inadvertent loss or damage to archaeological sites as well as intentional vandalism due to increased accessibility may occur, but would probably be minimal. Cultural resource management would continue without regard to wilderness management.	The benefits of protection of cultural resources including 60 recorded sites from most surface disturbance and all vehicular access would outweigh adverse effects from increased future recreational use. Management of cultural resources could be restricted in order to protect other wilderness values.	Cultural resources, including 37 recorded sites would receive protection as a result of wilderness designation with this alternative. All sites in the nondesignated area would continue to be protected by existing laws.

NORTH ESCALANTE CANYON/THE GULCH ISA

**Table 3 (Continued)
Comparative Summary of Impacts by Alternatives**

Alternatives

	Recommendation Large Partial Wilderness (91,558 Acres)	No Action/No Wilderness	All Wilderness (119,752 Acres)	Small Partial Wilderness (54,500 Acres)
Resource Impacts on Recreation	<p>The quality of primitive recreational opportunities would be preserved overall in the designated area. The quality of the primitive opportunity would be directly reduced on 60 acres and indirectly reduced on up to 7,185 acres. Both primitive and motorized recreational use would increase. Vehicular recreational use would be less than 4 percent of the total use.</p>	<p>The quality of primitive recreation would be directly reduced on 104 acres and indirectly reduced on about 11,975 acres. Both primitive and motorized recreation use would increase but vehicular use would comprise no more than 4 percent of the total.</p>	<p>The All Wilderness Alternative would preserve primitive recreation opportunities overall by reducing the likelihood for surface-disturbing activities and increasing management attention and recognition of recreational values. Primitive recreational values would be reduced in quality directly on 46 acres and indirectly on up to 3,593 acres of the ISA due to valid existing rights. ORV use would be precluded but primitive use would increase.</p>	<p>The quality of primitive recreational opportunities would be preserved overall in the designated area. The quality of the primitive opportunity would be directly reduced on 67 acres and indirectly reduced on up to 7,185 acres. Both primitive and motorized recreational use would increase. Vehicular recreational use would be no more than 4 percent of the total use.</p>

NORTH ESCALANTE CANYONS/THE GULCH INSTANT STUDY AREA

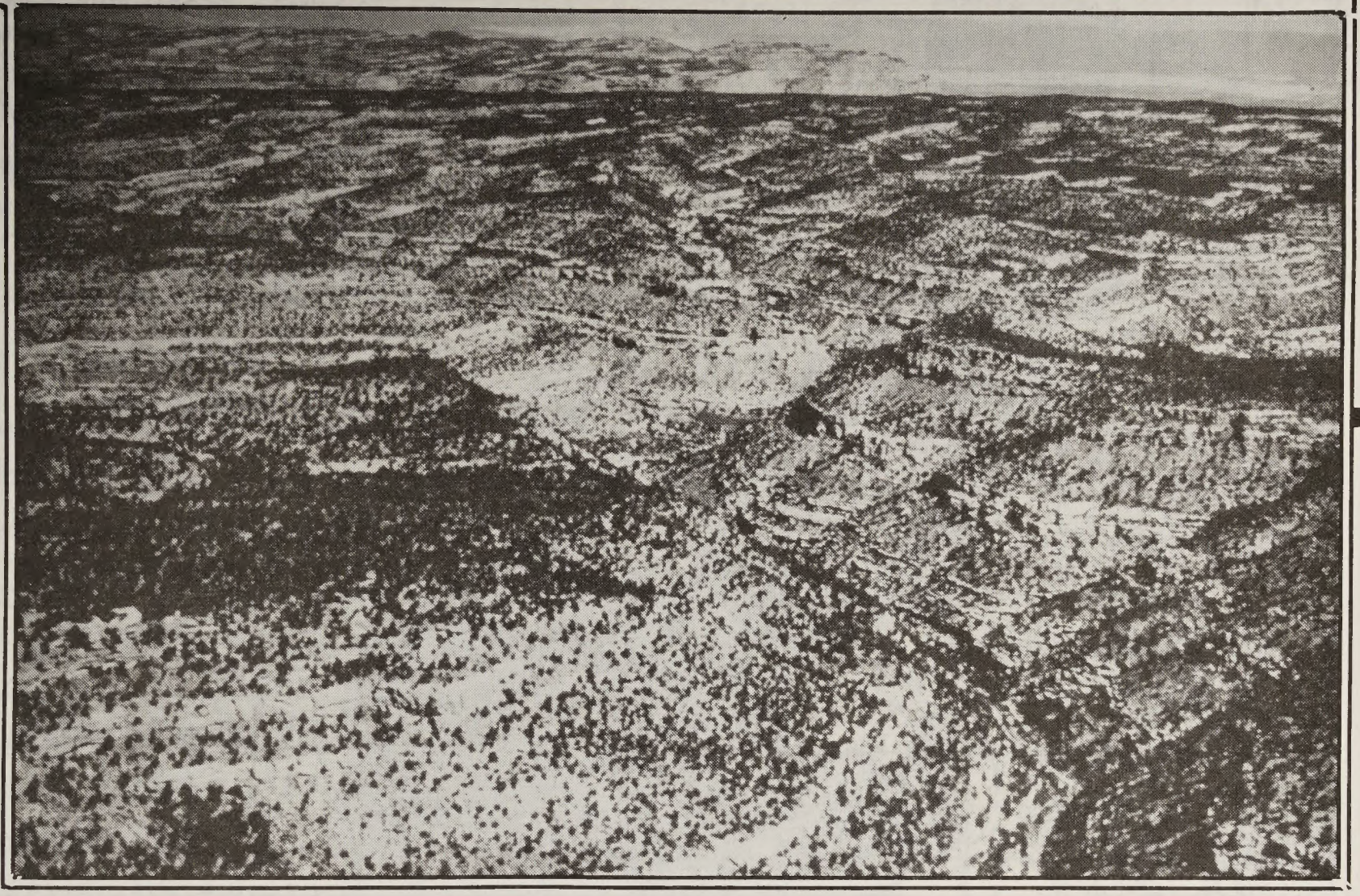
Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 34 S., R. 5 E., Sec. 32	640.00		State	No	Exchange		\$2,000
T. 34 S., R. 5 E., Sec. 36	640.00		State	No	Exchange		\$2,000
T. 35 S., R. 5 E., Sec. 2	584.76		State	No	Exchange		\$2,000
T. 35 S., R. 5 E., Sec. 16	640.00		State	No	Exchange		\$2,000
T. 35 S., R. 5 E., Sec. 36	640.00		State	No	Exchange		\$2,000
T. 35 S., R. 6 E., Sec. 2	639.79		State	No	Exchange		\$2,000
T. 35 S., R. 6 E., Sec. 16	640.00		State	No	Exchange		\$2,000
T. 35 S., R. 6 E., Sec. 32	640.00		State	No	Exchange		\$2,000
T. 36 S., R. 5 E., Sec. 2	636.48		State	No	Exchange		\$2,000

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

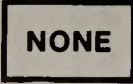


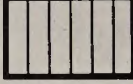
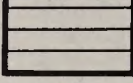
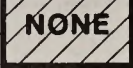
CARCASS CANYON WSA

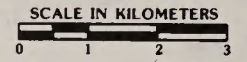
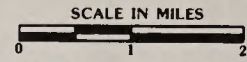
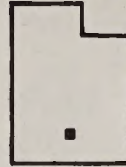
Carcass Canyon WSA



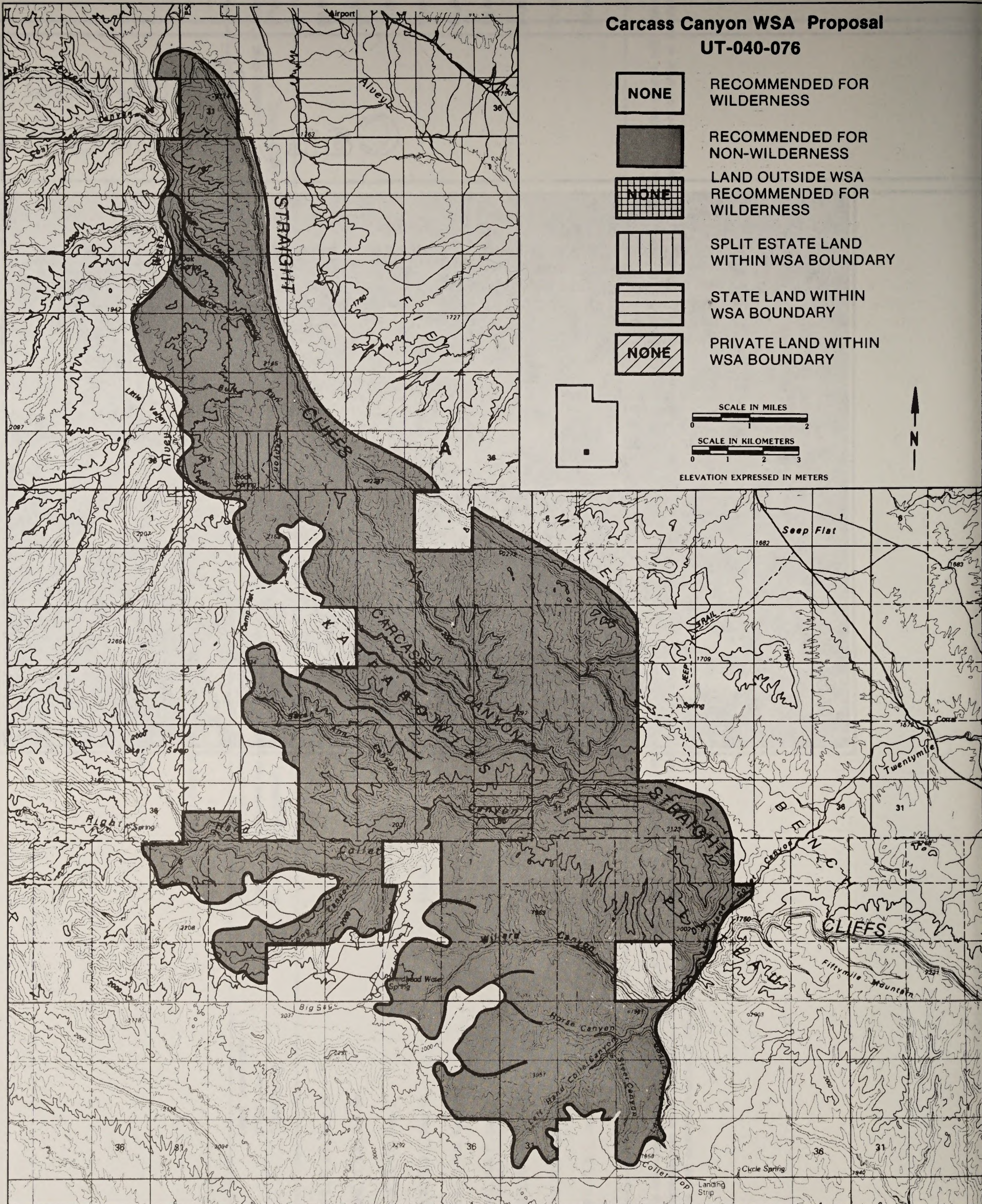
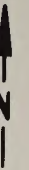
CARCASS CANYON WSA

Carcass Canyon WSA Proposal UT-040-076

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  PRIVATE LAND WITHIN WSA BOUNDARY



ELEVATION EXPRESSED IN METERS



T. 36 S.

T. 37 S.

T. 38 S.

R. 3 E.

R. 4 E.

October 1991

CARCASS CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 46,711 acres

The Carcass Canyon Wilderness Study Area (WSA) (UT-040-076) is in eastern Garfield and Kane Counties, about 2 miles south of Escalante, Utah (population 652). The WSA is irregularly shaped, narrower in the north than in the south, about 20 miles from north to south and 11 miles wide, from east to west. Roads separate the WSA from the Death Ridge WSA (UT-040-078) to the west and south and the Fiftymile Mountain WSA (UT-040-080) to the southeast (see Map). The WSA contains 46,711 acres of public land administered by the Bureau of Land Management (BLM). Two State sections (1,280 acres) and 640 acres of split-estate land with Federal surface and State minerals are in held in the WSA (see Table 1).

The Straight Cliffs, a distinctive easterly-facing escarpment, forms the eastern edge of the WSA except for 3 miles along section lines. The study area consists of several canyons that cut into the Kaiparowits Plateau. Elevations vary from less than 5,400 feet in the southeast corner of the WSA to more than 7,500 feet atop the Straight Cliffs. Pinyon-juniper dominates, but sagebrush, grasses, and scattered Douglas fir and ponderosa pine are also found.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	46,711
Split-Estate (BLM surface only) ^a	640
In-holdings (State, Private)	1,280
Total	48,631
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	0
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	0
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	46,711
Split-Estate	640
Total BLM land not recommended for wilderness	47,351
In-holdings (State, Private)	1,280

Source: BLM File Data

^a In this report, split-estate lands are defined as only those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface are classified according to the owner of the surface.

CARCASS CANYON WILDERNESS STUDY AREA

Two alternatives were analyzed in the EIS: a no wilderness (no action) alternative, which is the recommendation in this report, and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

0 acres

(recommended for wilderness)

46,711 acres

(recommended for nonwilderness)

The recommendation for this WSA is to release the entire area for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

Although all of the WSA exhibits the characteristic of naturalness, 57 percent of the area has outstanding opportunities for solitude and only 25 percent has outstanding opportunities for primitive recreation. A large portion (92 percent) of the WSA is within the Kaiparowits Known Recoverable Coal Resource Area. The potential for discovery of uranium is high. Extraction of coal and uranium are not expected in the short term, but the long-term mineral potential is considered to outweigh wilderness values in the WSA.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The naturalness attributes are of high quality in the canyon systems of the WSA. Important canyons include the Right Hand Collet Canyon, Sarah Ann Canyon, and the Carcass Canyon system. Imprints in the WSA include 2.5 miles of fence, two spring developments, one corral, and 5 miles of

way. Overall, the WSA appears natural, with the imprint of man substantially unnoticeable. The high quality of naturalness in the canyons has not changed since the BLM Intensive Wilderness Inventory decision. No surface-disturbing activities have occurred since the inventory.

B. Solitude

Opportunities for solitude meet the criterion for outstanding on approximately 26,500 acres (57 percent) of the WSA. Outstanding solitude exists where combinations of terrain and vegetation provide a sense of isolation by screening visitors from each other. The size and configuration of the WSA neither enhances nor detracts from the opportunities for solitude.

Outstanding opportunities for solitude are in the Right Hand and Left Hand Collet drainage where canyons and intervening rimrock ridges provide screening. Terrain enhances screening by pinyon-juniper, Douglas fir, and Ponderosa pine forest. Most canyons in the WSA have outstanding opportunities for solitude.

In much of the remainder of the WSA, the benches and ridges between canyons are flat with a pinyon-juniper forest cover of moderate density. In the Calf Canyon-Alvey Wash area, the Carcass Canyon drainage, and the area north of Willard Canyon, the intervening ridges have ledges and a denser forest cover. Visitors can find seclusion in the Carcass Canyon system of canyons.

The sights and sounds of human activities are not apparent from most places within the WSA. From the top of the Straight Cliffs, vehicular activity on the Hole-in-the-Rock Road can be observed, but this is a minor distraction.

C. Primitive and Unconfined Recreation

Overall, outstanding opportunities for primitive recreation are found on 11,800 acres (25 percent) of the WSA. Approximately 10,500 of these acres also have outstanding opportunities for solitude.

The opportunity to explore is outstanding in the Carcass Canyon WSA. No other outstanding individual activity was

CARCASS CANYON WILDERNESS STUDY AREA

identified, nor has a diversity of primitive activities been identified.

The opportunity for exploration is outstanding in complex canyon systems, along the top of the Straight Cliffs, and on the narrow ridges in the WSA. The Carcass Canyon drainage is an area of 15 square miles with three major forks which comprise 16 miles of canyon bottom. Numerous lateral canyons join the main branches, and the drainage system totals 43 miles of canyons. Because of the density of canyons, approximately 3 miles of canyon bottom per square mile, the intervening ridges between canyons in the Carcass Canyon drainage are extremely narrow and precipitous and represent the best opportunity for hiking and exploration. The rim of the Straight Cliffs also exhibits this opportunity, with 1,700 acres north and south of the Carcass Canyon area.

D. Special Features

The paleontological values contained within the WSA are of scientific value. Invertebrate and vertebrate specimens are found in the Straight Cliffs, Tropic Shale, and Dakota Formations. These scientific values occur along the entire length of the Straight Cliffs.

The naturally occurring coal fires of Right Hand Collet Canyon left clinkers and deep red ash on the ground surface, which dominate the visual character in portions of the drainage.

The Straight Cliffs, rising 2,000 feet above the Escalante Valley floor, are a scenic landmark in southern Utah. The cliffs are the dominant topographic feature between the Town of Escalante and Lake Powell, and provide spectacular scenic views of the Escalante River drainage, the Waterpocket Fold, Boulder Mountain, and the Henry Mountains. One arch with a span of 40 feet, in Calf Canyon, is visible from the Alvey Wash road.

Several archaeological sites have been recorded in this WSA. The sites consist of open campsites, lithic scatters, petroglyphs, and cave habitation sites.

The WSA has a small population of cougar, which is a wildlife species common-

ly associated with wilderness. Peregrine falcons and bald eagles, which are listed as endangered species, may occasionally use the WSA. Nine other animal species and seven plant species, which are considered to be sensitive species, may occur in the WSA. Refer to Appendix 4 and the Affected Environment, Wildlife Including Special Status Species section of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a potential natural vegetation (PNV) ecosystem not presently represented in Utah or in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is entirely juniper-pinyon woodland (46,711 acres). The PNV in the WSA is represented in the NWPS nationally and in Utah and in other BLM study areas both in and outside of Utah. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is not within a 5-hour drive of any major population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Carcass Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 64 areas comprising 2,834,115 acres in Utah and Arizona.

CARCASS CANYON WILDERNESS STUDY AREA

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,209,294
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,659,487

Source: BLM File Data.

There are seven designated wilderness areas within 100 miles of the WSA. In a clockwise direction beginning to the north are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 45,00-acre Dark Canyon Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), and the 7,000-acre Ashdown Gorge Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

The Carcass Canyon WSA could be effectively managed as wilderness in the foreseeable future. Even though there are 18,494 acres of coal lease, 1,071 acres of post-FLPMA oil and gas lease in the WSA, it is expected that these leases would expire and would not be renewed if the area is designated as wilderness. There are 1,780 acres of mining claims in the WSA. Because of moderate to high uranium potential it is expected that part of the existing and future mining claims located as of the date of designation will be at least explored, resulting in about 7 acres of surface disturbance in the foreseeable future.

The presence of three in-held sections of State land in the WSA, including split-estate, could complicate wilderness management in the long-term future.

Of the 1,920 acres of in-held State land, the 640 acres of split-estate are leased for coal. Because of the known coal resources in the WSA, and some potential for oil and gas, it is projected that new access roads to the State land would be required through the area following wilderness designation. Additionally, any coal mining operations on the State lands and cherrystems would reduce wilderness values on the adjacent wilderness lands.

Livestock grazing and maintenance of existing facilities including nine spring developments, 2.5 miles of fence, two reservoirs, and one corral would continue, but would not significantly affect the wilderness values of the WSA.

Energy and Mineral Resource Values

Because the WSA is not recommended for wilderness designation, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) did not prepare a mineral assessment report for the area. The USGS and USBM mineral summary for this WSA, however, states that the entire study area has a high mineral potential for coal and a moderate resource potential for oil and gas, carbon dioxide, and geothermal sources in the subsurface and for uranium and thin beds of gypsum in the surface and subsurface. The study area also has a low mineral resource potential for all metals other than uranium.

According to BLM geologists, the potential for oil and gas resources is low.

CARCASS CANYON WILDERNESS STUDY AREA

The WSA is within the Kaiparowits coal field. Movable coal-bearing strata underlie all of the WSA except for about 4,000 acres along the eastern boundary. An estimated 550 million tons of relatively high quality coal are in the WSA.

The potential for geothermal energy is low. No hot springs are known in the vicinity of the WSA and the geologic conditions are not favorable for geothermal resources. The central portion of the WSA is considered to have a high potential for undiscovered deposits of uranium, and the remainder of the WSA has moderate potential. The depth of the formations that may contain uranium deposits is about 700 feet, however, indicating that recovery of uranium may not be undertaken in the short-term future.

Impacts on Resources

The comparative impact table (Table 3) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

With BLM's recommendation the WSA would not be designated as wilderness but would be released for other uses. The recommended action would not result in a loss of local employment or income. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development in the long term.

The study area would be open to coal leasing. Coal mining is not anticipated in the short term, but exploration and mining could occur within the next 30 years. With coal development there would be major beneficial and adverse effects in Garfield and Kane Counties.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 54 inputs specifically addressing this WSA were received from 324 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statement by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 45 commenters supported wilderness designation for part or all of the WSA, while 274 commenters were opposed. Five commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the special features in the WSA. The majority of those commenting in favor of wilderness were almost equally from rural and urban Utah and from outside the State. Of particular concern was the need to protect other resource values.

Those opposing wilderness were concerned that wilderness would conflict with or preclude mineral exploration and development, livestock operations, flood control and water rights, public access, or other uses; is not compatible with multiple use; would harm State and local economies; and that designation is not necessary to protect the WSA. The great majority of those opposed were from rural Utah.

Two Federal agencies, the FS and USBM commented on the Draft EIS. The FS stated that the Dixie National Forest concurs with the recommendation to not propose wilderness in the WSA. The USBM did not take a position regarding designation or nondesignation but commented that BLM had understated the petroleum potential of the WSA.

No comment letters were received on the Final EIS.

There are two sections (1,280 acres) of State land and one section (640 acres) of split-estate land with State minerals in the WSA. In commenting on the Draft EIS, the State of Utah expressed general

CARCASS CANYON WILDERNESS STUDY AREA

opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State ranks the WSA as low in wilderness quality and high for coal conflict. The State noted that the cultural resources on the Escalante Rim and south of Right Hand Collet Canyon may need to be recognized.

The Garfield and Kane County Commissions are opposed to wilderness designation of the Carcass Canyon WSA and have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS the Counties supported BLM's no action/no wilderness proposed action.

The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. Garfield County previously proposed to the Utah Congressional Delegation that 111,053 acres of BLM lands in three WSAs and 31,600 acres in one FS unit in the County be recommended as wilderness. The Garfield County Master Plan recommends that the remaining lands in the county, including the Carcass Canyon WSA, be retained for multiple uses.

CARCASS CANYON WSA

Table 3
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives	
	Recommendation No Action/No Wilderness	All Wilderness (61,550 Acres)
Impacts on Wilderness Values	<p>Wilderness values would not be protected by wilderness designation, and loss would occur as intrusions increase. In the short-term future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 628 acres of the WSA because of development of rangeland projects, vegetation treatments, and access to State in-held lands for mineral exploration and indirectly reduced in quality on up to 7,007 acres. Special features would not be significantly affected. Vehicular use of 5 miles of ways as well as washes and exploration roads would occasionally detract from opportunities for solitude and primitive recreation. Coal development over the long term would result in direct loss of wilderness values on 40 acres and an indirect reduction in the quality of wilderness values on up to an additional 4,670 acres. Special features would not be significantly affected.</p>	<p>Wilderness designation would preserve overall the wilderness values in the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 9 acres because of uranium exploration and development of access roads to State in-holdings for mineral exploration. The quality of wilderness values would be indirectly reduced on up to 1,400 acres of the WSA. Special features would be preserved.</p>
Impacts on Vegetation	<p>Special status plant species would not be significantly affected. Only about 1.4 percent (668 acres) of the pinyon-juniper woodland in the WSA would be altered as a result of rangeland projects and long term coal development. Therefore, there would not be significant changes in the vegetation types in the WSA.</p>	<p>Implementation of the All Wilderness Alternative would not significantly affect the vegetation resource in the WSA. Vegetation types and special status plant species would be protected because potential disturbance would be reduced to 9 acres.</p>

CARCASS CANYON WSA

**Table 3 (Continued)
Comparative Summary of Impacts by Alternative**

Issue Topic	Recommendation No Action/No Wilderness	Alternatives All Wilderness (61,550 Acres)
Impacts on Mineral and Energy Exploration and Development	Implementation of the No Action/No Wilderness Alternative would not adversely affect mineral exploration or production because minerals could be leased, claimed, and developed as at present.	Wilderness designation would preclude or severely constrain potential development of about 280 million tons of recoverable coal. Loss of exploration and development opportunities for other mineral and energy resources would not be significant because the probability of development is low even if the area is not designated as wilderness.
Impacts on Wildlife Habitat and Populations	Wildlife habitat and populations including special status animal species would not be significantly affected. Implementation of the projected water and vegetation treatment projects would benefit wildlife by providing additional water, forage, and ecotones. Less than 1.4 percent (668 acres) of the wildlife habitat in the WSA would be affected.	Wilderness designation would preclude 600 acres of vegetation treatments designed to improve wildlife habitat and livestock forage, but would provide all species with additional opportunities for solitude. Only 9 acres of wildlife habitat would be disturbed in the WSA.
Impacts on Livestock Management	Livestock management and grazing lands would not be adversely affected because access and management practices would continue as at present. Approximately 600 acres of seeding that would produce 95 AUMs of forage could be done.	Wilderness designation would not significantly affect current livestock management practices. Restricting motorized use of the 5 miles of ways could slightly increase management costs and inconvenience the 7 permittees. The opportunity for an increase of 95 AUMs through vegetation treatments would be foregone.

CARCASS CANYON WSA

**Table 3 (Continued)
Comparative Summary of Impacts by Alternative**

Issue Topic	Recommendation No Action/No Wilderness	Alternatives All Wilderness (61,550 Acres)
Impacts on Cultural Resources	Cultural resources would continue to be protected by existing laws. Unintentional damages to sites may occur as a result of vegetation treatments and some vandalism may occur due to continued vehicular access. Cultural resource management would continue without regard to preservation of other wilderness values.	Prohibiting most surface disturbance and vehicular access would provide additional protection for cultural resources including 105 known sites. Management of cultural resources may be restricted in scope and execution in order to protect other wilderness values.
Impacts on Economic Conditions	No loss of local employment or income would occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development in the long term. There would be major beneficial and adverse effects in Garfield and Kane Counties.	Wilderness designation would not significantly affect present local or regional economic conditions. However, new leasing in the WSA would not be allowed; therefore, potential sales and revenues from the coal would be foregone. Over the long term, coal development and associated beneficial and adverse economic impacts would not occur. This would significantly change future economic conditions in Garfield and Kane Counties from what they would be without wilderness designation.

SCORPION WSA

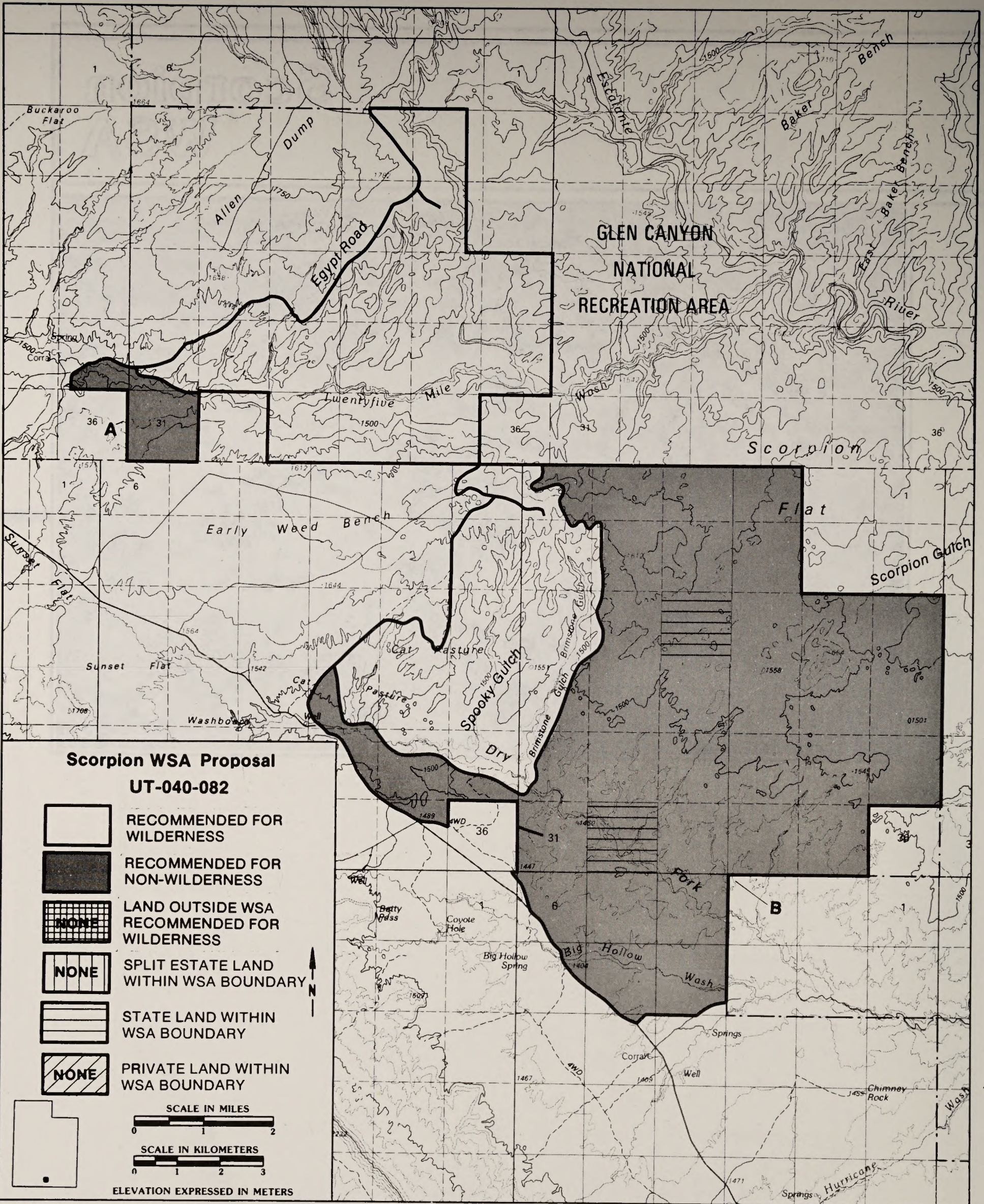
Scorpion WSA



SCORPION WSA

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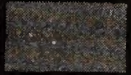

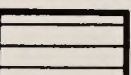


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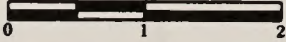
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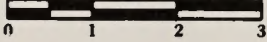
Scorpion WSA Proposal UT-040-082

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY

SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS

SCORPION WILDERNESS STUDY AREA

1. THE STUDY AREA: 35,884 acres

The Scorpion Wilderness Study Area (WSA) (UT-040-082) is in eastern Kane and Garfield Counties, Utah, about 25 miles southeast of Escalante, Utah (population 652). The eastern boundary of the WSA is adjacent to the Glen Canyon National Recreation Area (GCNRA). The remainder of the WSA is bounded by the Hole-in-the-Rock, Cat Pasture, Early Weed Bench, and Egypt roads. In locations where State lands intervene along the GCNRA or road borders, the State section forms the WSA boundary (see Map). The WSA is just east of the Hole-in-the-Rock Road, an historic, improved dirt road from Escalante to Lake Powell, in the GCNRA.

The WSA contains 35,884 acres of public land administered by the Bureau of Land Management (BLM). Two State sections (1,280 acres) are within the WSA, but no non-Federal lands are in the portion recommended for wilderness designation (see Table 1).

The study area consists of rugged bench and canyon country deeply dissected by ephemeral streams. The recommended portion of the WSA includes the Twentyfive Mile Wash in the north and short, southwest-trending canyons in the south. Elevations vary from less than 4,800 feet on canyon floors in the northern portion to more than 5,600 feet on the benchlands in the southern portion.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	35,884
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	1,280
Total	37,164
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	14,978
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	14,978
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	20,906
Split-Estate	0
Total BLM land not recommended for wilderness	20,906
In-holdings (State, Private)	1,280

Source: BLM File Data

SCORPION WILDERNESS STUDY AREA

Desert shrub is predominant over much of the area, but a large portion is bare rock.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative where 14,978 acres would be designated as wilderness and the remaining 20,906 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 14,978 acres
(recommended for wilderness)
- 20,906 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 14,978 acres as wilderness and to release the remaining 20,906 acres for uses other than as wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The portions recommended for wilderness designation would include all of the areas in the WSA with high wilderness values. All of the proposed area is natural. Included within the recommendation are areas exhibiting exceptional wilderness character such as the Twentyfive Mile Wash Canyon and the slot canyons and slickrock associated with this drainage, the canyonlands of the Brimstone Gulch-Cat Pasture area, and the upper Dry Fork of Coyote Gulch with its slot canyon tributaries such as Spooky Gulch. The recommended area is adjacent to but excludes the Egypt and Brimstone parking trailheads for backpackers seeking access to areas in the GCNRA such as the Escalante River, lower Twentyfive Mile Wash, and Scorpion Gulch.

Area A not proposed for wilderness designation includes the section of the Twentyfive Mile Wash that lacks entrenchment and is currently used as a staging area for backpacking trips through the canyon portion to the Escalante River. Area B not proposed for wilderness designation includes the portions of the Dry Fork of Coyote Gulch and Big Hollow Wash and the open portions of Scorpion Flat that lack outstanding opportunities for solitude and primitive recreation.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The entire WSA meets the criteria of naturalness. The quality of naturalness in the WSA is related to the natural character of the adjoining lands in the GCNRA. The Twentyfive Mile Wash Canyon and associated slickrock benches continue into the GCNRA with the aggregate effect of enhancing the quality of naturalness in the WSA portion. In the Brimstone Gulch area, a convoluted topography and lack of any imprints of man combine to create an area with very high quality naturalness attributes. Imprints of man within the WSA include 4 miles of ways, a fence across the Twentyfive Mile Wash, a fence above the Dry Fork of Coyote Gulch, and a fence in the Dry Fork below Brimstone Gulch. These imprints combined total about 8 acres (less than 1 percent of the WSA) and are substantially unnoticeable.

In the Scorpion WSA, the high naturalness quality has not changed since the BLM Intensive Wilderness Inventory in 1980. No additional imprints have occurred in the WSA.

B. Solitude

Approximately 73 percent of the WSA lacks outstanding opportunities for solitude. The opportunity for solitude in

SCORPION WILDERNESS STUDY AREA

the WSA is essentially dependent on screening from the terrain. Narrow, winding canyons totalling 56 miles within the WSA are the major determinants of solitude. Twentyfive Mile Wash and its side canyons, the Dry Fork of Coyote Gulch and especially its narrows, and the side canyons to the Dry Fork of Coyote Gulch, are narrow and winding canyons that provide opportunities for solitude. Areas containing opportunities for solitude within the WSA aggregate approximately 9,700 acres. Areas within the WSA that exhibit no opportunity for solitude include the Big Hollow Wash and Black Ridge areas southwest of the Dry Fork of Coyote Gulch, Early Weed Bench, and Allen Dump.

The Scorpion Flat area is a relatively flat, undifferentiated, and sparsely vegetated flat extending to the rim of the Escalante River Canyon. The Scorpion Flat landscape consists of broken patchwork patterns of sand and slickrock, but it provides little opportunity for solitude. About 14,700 acres of the Scorpion Flat are within the WSA.

The Twentyfive Mile Wash portion of the WSA is a large slickrock basin, which enhances the opportunity for visitors to find isolation and seclusion. The tributaries to Twentyfive Mile Wash and the Dry Fork of Coyote Gulch exhibit concentrations of deep slots that are not equaled elsewhere in the Escalante River drainage. The main stream channel of Twentyfive Mile Wash is entrenched and sinuous along most of its length and exhibits an outstanding opportunity for solitude.

C. Primitive and Unconfined Recreation

The total acreage providing outstanding opportunities for primitive and unconfined recreation is approximately 11,400 acres, while 24,484 acres do not meet the standard.

The WSA offers outstanding opportunities for backpacking, horseback riding, hiking, sightseeing, and photography. The outstanding opportunities for primitive and unconfined recreation in the WSA are derivative of the individual quality of several activities rather than the presence of a wide spectrum of activities.

Hiking is often associated with sightseeing and photography. The narrow tributary canyons and intervening slickrock areas of Twentyfive Mile Wash; the tributary canyons to the Dry Fork of Coyote Gulch, such as Spooky Gulch and Brimstone Gulch; portions of upper Brimstone Gulch; and various sections of the Dry Fork all exhibit some unique and highly aesthetic landscapes. These canyons are intriguing and provide challenging photographic subjects. Because they are so narrow and tortuous, they are ideal canyons for an exploratory type of hiking.

Backpacking and horseback riding opportunities are suitable in the same parts of the WSA. In most cases, these two activities are related to overnight or longer trips into the GCNRA where the Escalante River and Coyote Gulch Canyons are backpacking and horseback riding destinations. The Twentyfive Mile Wash Canyon provides direct access to the Escalante River. The Egypt slickrock area provides access to the river via Fence Canyon from the roadhead at the Allen Dump promontory. In both cases, the routes through the WSA have excellent photographic and sightseeing attributes and the routes themselves provide fine backpacking and horseback riding experiences. The tributary canyon to Twentyfive Mile Wash near the GCNRA in Sections 24 and 25 could be considered a destination within the WSA for overnight foot or horseback trips. The other area having backpacking opportunity in the WSA occurs in the Dry Fork of Coyote Gulch. Dry Fork provides backpacking access to Coyote Gulch and the Escalante River. The Twentyfive Mile Wash Canyon and the Dry Fork provide primitive recreational opportunity as well as access to destinations in the GCNRA.

Sightseeing and photographic opportunities are outstanding in the Twentyfive Mile Wash drainage in areas where backpacking, horseback riding, and hiking opportunities are not outstanding. The upper Twentyfive Mile Wash drainage area exhibits the largest expanse of exposed Navajo Sandstone slickrock in the middle Escalante River drainage. Opportunities for sightseeing and photography are also excellent in sections of the Dry Fork of Coyote Gulch.

SCORPION WILDERNESS STUDY AREA

D. Special Features

Landscapes in the WSA are characteristic of the scenic geology of the Escalante River basin. The aggregate area of scenic special features is about 11,100 acres.

The Twentyfive Mile Wash Canyon and one tributary canyon are entrenched and meandering, cut into red sandstone, and support riparian vegetation. The contrasts of colors and of forms represent the classic scenery of the Glen Canyon-Escalante Canyon region, and are typical of the western tributary canyon to the Escalante River from Davis Gulch to Harris Wash.

The Twentyfive Mile Wash is entrenched in a large basin below the Allen Dump and the Early Weed Bench-Scorpion cliffs. This physiographic feature is of esthetic value because it is composed almost entirely of exposed slickrock. It represents the largest rock exposure of this type on the west side of the Escalante River below Highway 12. Some areas of this slickrock exhibit parallel cracks, small domes, and winding slots that enhance its scenic value.

The Dry Fork of Coyote Gulch Canyon is an unusual landscape feature because it is one of the few major western drainages to the Escalante River lacking riparian vegetation. The Dry Fork landscape consists of a shallow, winding canyon containing dune areas and several narrows. The scenic value of the Dry Fork of Coyote Gulch is enhanced by several extremely narrow and tortuous side canyons. Spooky Gulch and Brimstone Gulch are named examples.

The upper Brimstone Gulch-Cat Pasture area below Early Weed Bench is a small area with impressive scenic features, including colorful slickrock domes, short box canyons, and small buttes.

Peregrine falcons and bald eagles, which are listed as endangered species, may occasionally use the WSA. The study area has a small population of cougar which is a wildlife species associated with wilderness. Seven other animal species and five plant species which are considered to be sensitive occur, or may occur, in the WSA. Refer to Appendix 4

and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM State-wide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is juniper-pinyon woodland (5,884 acres) and galleta-threeawn shrubsteppe (30,000 acres). Juniper-pinyon woodland PNV is represented in the NWPS both nationally and in Utah and in BLM study areas both in and outside of Utah. Galleta-threeawn shrubsteppe is not represented in the NWPS, however, although it is represented in 10 other WSAs, all in Utah.

Designation of the Scorpion WSA would expand the diversity of natural systems in the NWPS and would add a combination of ecosystems not now represented. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is not within a 5-hour drive of any major population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Scorpion WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January 1987, the NWPS included 64 areas totaling about 2,834,115 acres in Utah and Arizona.

SCORPION WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	10	1,393,647	84	2,137,221
Galleta-Threeawn Shrubsteppe	0	0	10	160,726
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	20,000	53	1,676,198
Galleta-Threeawn Shrubsteppe	0	0	10	160,726

Source: BLM File Data.

There are seven designated wilderness areas within 100 miles of the WSA. In a clockwise direction beginning to the north area the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 45,000-acre Dark Canyon Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), and the 7,000-acre Ashdown Gorge Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

The entire WSA, including the 14,978 acres recommended for wilderness designation, can be managed as wilderness to preserve values now present in the area. Resource and land use conflicts are not now a problem in the WSA and are not anticipated to be in the future. There are no mineral leases or mining claims to interfere with wilderness management. Livestock grazing and maintenance of about a 0.5 mile of fence would continue but would not affect wilderness values.

Two sections of State land (1,280 acres) are in the part of the WSA not recommended for wilderness. However, there are no resource values in the area that would create a need for access to these lands.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) examined the area proposed for wilderness and prepared a mineral assessment report for the Scorpion WSA (USGS Bulletin 1747-C, Susan Bartsch-Winkler, et al., 1989). The report indicates that demonstrated subeconomic resources of less than 30,000 short tons of gypsum are estimated to occur in the study area, i.e., the portion of the WSA recommended for wilderness designation. The Navajo Sandstone could have industrial uses, but it is not considered an economic resource within the study area due to the distance from markets. Sand deposits in the study area are not unique, and similar deposits are closer to existing markets. The mineral resource potential for undiscovered gypsum is low. The energy resource potential for geothermal resources is also low. The mineral resource potential for metals other than uranium is low. The energy resource potential for oil, gas, and carbon dioxide is moderate.

Impacts on Resources

The comparative impact table (Table 3) summarizes the effects of wilderness designation or nondesignation on wilderness values which are considered to be the only resource values that would be significantly affected.

SCORPION WILDERNESS STUDY AREA

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 114 inputs specifically addressing this WSA were received from 652 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statement by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 391 commenters supported wilderness designation for part or all of the WSA, while 257 commenters were opposed. Four commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

The majority of those favoring wilderness designation were from other states. Of particular concern to the commenters was the perceived need to protect wilderness values, preserve the values in the WSA for future generations, and to add to the diversity in the NWPS.

Those opposing wilderness were concerned that wilderness would conflict with or preclude mineral exploration and development, livestock operations, flood control and water rights, public access, or other uses; is not compatible with multiple use; would harm State and local economies; and that designation is not necessary to protect the WSA. The great majority of those opposed were from rural Utah.

Two Federal agencies, the National Park Service (NPS) and USBM commented on the

Draft EIS. The NPS stated that the all wilderness alternative would be the preferred alternative. The NPS noted that the Scorpion WSA is a special concern because it includes the upper reaches of Coyote Gulch, the most heavily used backpacking area in the GCNRA.

The USBM did not take a position regarding designation or nondesignation but commented that BLM understated the petroleum potential and overstated the silver potential of the Scorpion WSA.

No comment letters were received on the Final EIS.

There are no State lands in the portion of the WSA recommended for wilderness designation. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State considers the WSA to have relatively low quality wilderness values and low conflicts. Although the State noted that there is little conflict with the uranium in the Circle Cliffs Favorable Area, gas company reports indicate that there is high potential for economic accumulations of oil and gas.

The Garfield and Kane County Commissions are opposed to wilderness designation of the Scorpion WSA and have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah.

The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. Garfield County previously proposed to the Utah Congressional Delegation that 111,053 acres of BLM lands in three WSAs and 31,600 acres in one FS unit in the County be recommended as wilderness. The Garfield County Master Plan recommends that the remaining lands in the County, including the Scorpion WSA, be retained for multiple uses.

In commenting on the Draft EIS, the Counties stated that the Scorpion WSA is best suited as a possible addition to the GCNRA for developed recreation in the Twentyfive Mile Wash and Coyote Gulch areas as identified in the NPS management plan. The Counties believe

SCORPION WILDERNESS STUDY AREA

that such recreational use will benefit the local economies and recreationists much more than wilderness designation, and that nondesignation will allow for possible future development of the identified uranium deposits.

SCORPION WSA

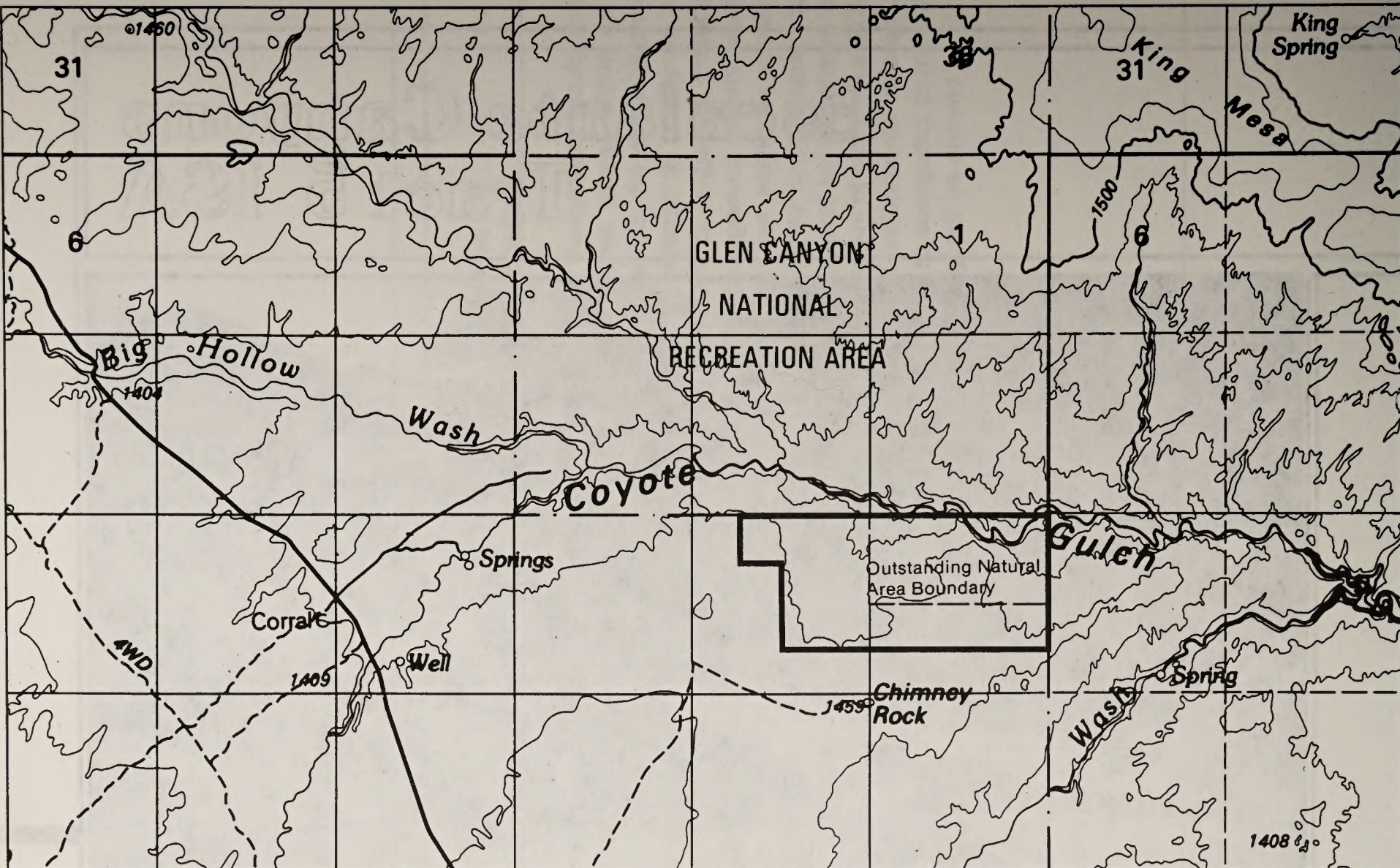
Table 3
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives		
	Recommendation Partial Wilderness (14,978 Acres)	No Action/No Wilderness	All Wilderness (35,884 Acres)
Impacts on Wilderness Values	Wilderness values would be preserved over- all in the designated area which would be approximately 42 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive rec- reation would be reduced in quality on 4 acres of the WSA. Most special features would be preserved. Vehicular activity (3 miles of ways) in the nondesignated portion would continue to be an occasional annoy- ance that would detract from opportunities for solitude and primitive recreation in the WSA. This alternative would complement and enhance the NPS proposal for wilder- ness designation and management of the con- tiguous NRA lands. However, developments related to providing access to contiguous proposed NPS wilderness may not be allow- ed.	Wilderness values would not be protected by wilderness designation. In the foresee- able future, naturalness and opportunities for solitude and primitive recreation would be reduced in quality on 4 acres of the WSA. Special features including scenic fea- tures, Class A scenery, endangered and sen- sitive species, wildlife associated with wil- derness, and perennial streams would not be significantly affected. Vehicular activity (4 miles of ways) would continue to occa- sionally detract from opportunities for soli- tude and primitive recreation. This alterna- tive would not complement the NPS propos- al for wilderness designation and manage- ment of contiguous GCNRA lands. However, development related to providing access to the contiguous proposed NPS wilderness would be allowed.	Wilderness designation would preserve wil- derness values overall within the WSA. In the foreseeable future, wilderness values would be reduced in quality on 4 acres by development of rangeland projects, but wil- derness management criteria would be met. Special features would be preserved. This alternative would complement and enhance the NPS proposal for wilderness designation and management of contiguous GCNRA lands. However, developments related to provid- ing access to contiguous proposed NPS wil- derness may not be allowed.


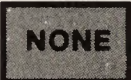

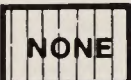
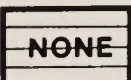
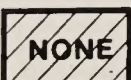
Escalante Canyons Tract 5 ISA



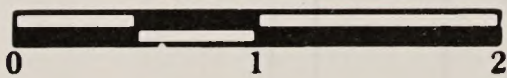
ESCALANTE CANYONS TRACT 5 ISA



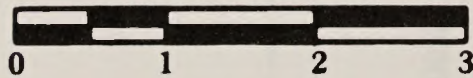
Escalante Canyons Tract 5 ISA Proposal UT-040-077

-  RECOMMENDED FOR WILDERNESS
-  NONE RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN ISA BOUNDARY
-  NONE STATE LAND WITHIN ISA BOUNDARY
-  NONE PRIVATE LAND WITHIN ISA BOUNDARY

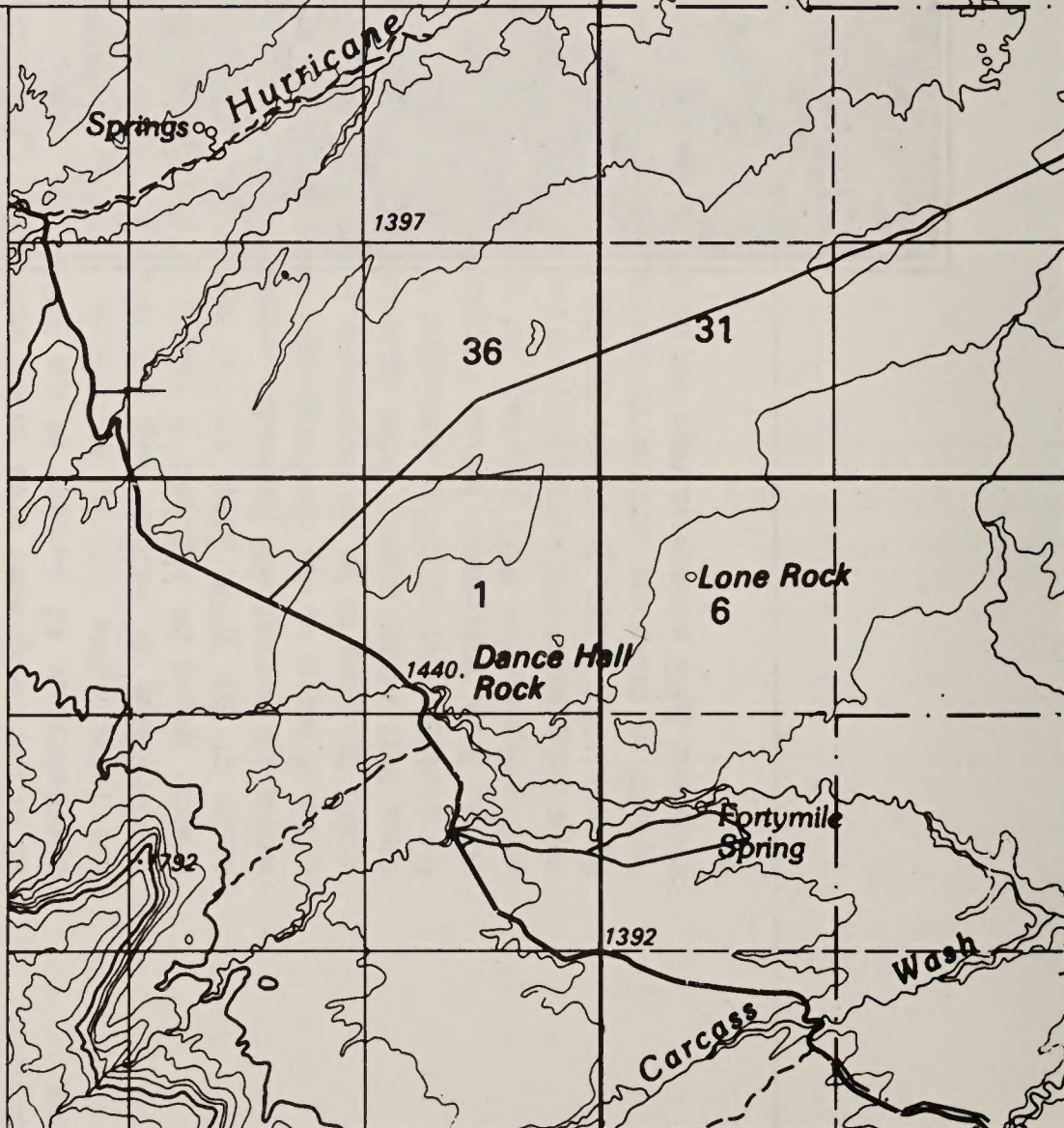
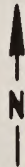
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ESCALANTE CANYONS TRACT 5 INSTANT STUDY AREA

1. THE STUDY AREA: 760 acres

The Escalante Canyons Tract 5 Instant Study Area (ISA) is in eastern Kane County, about 41 miles south of Escalante, Utah (population 652). The study area extends about 1.75 miles from east to west and 0.75 mile from north to south. The northern and eastern boundaries of the ISA are adjacent to Glen Canyon National Recreation Area (GCNRA). The western and southern boundaries are along section and subsection lines, which administratively define the ISA (see Map). The ISA contains 760 acres of public land administered by the Bureau of Land Management (BLM). No State or split-estate lands are in the ISA. The study area encloses 320 acres of the Escalante Canyons Outstanding Natural Area (ONA).

The northeastern portion of the ISA includes about 0.5 mile of Coyote Gulch. Coyote Gulch is a major segment of the canyon complex of the Escalante River, which flows into the Escalante arm of Lake Powell in the GCNRA. The remainder of the ISA is benchland that slopes northward into Coyote Gulch. Elevations in the ISA range from less than 4,200 feet to 4,715 feet. Desert shrub is the only vegetative type in the ISA.

The ISA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE ISA	ACRES
BLM (surface and subsurface)	760
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	760
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the ISA)	760
BLM (outside the ISA)	0
Split-Estate (within the ISA)	0
Split-Estate (outside the ISA)	0
Total BLM land recommended for wilderness	760
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

ESCALANTE CANYONS TRACT 5 INSTANT STUDY AREA

Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation of this report and a no wilderness (no action) alternative.

2. RECOMMENDATION AND RATIONALE:

- 760 acres
(recommended for wilderness)
- 0 acres
(recommended for nonwilderness)

The recommendation for this ISA is to designate the entire area as wilderness. This is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The ISA is proposed for wilderness designation only in conjunction with wilderness proposed for adjacent portions of the GCNRA. The 0.5 mile section of Coyote Gulch in the ISA is an integral portion of a 15-mile hiking route in the GCNRA, leading down the Coyote Gulch to the Escalante River.

All of the ISA is in a natural state. About 30 percent of the ISA has outstanding opportunities for solitude but only about 4 percent, in the backpacking route of Coyote Gulch, has outstanding opportunities for primitive recreation.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The entire ISA is in a natural condition with no imprints of man. The high quality of naturalness has not changed since the BLM's Intensive Wilderness Inventory (1980).

B. Solitude

Approximately 230 acres (30 percent) of the ISA have outstanding opportunities for solitude, but 530 acres (70 percent) do not meet the standard for an outstanding opportunity.

The outstanding opportunity for solitude in this ISA is entirely in the canyon of Coyote Gulch. The canyon is separated from the remainder of the ISA by its canyon walls. Views within the canyon are limited to 0.25 mile or less. The screening in the canyon provides opportunities for seclusion when considered in conjunction with contiguous National Park Service (NPS) lands in the GCNRA that are proposed for wilderness designation. Outside sights and sounds are an insignificant influence on solitude in this ISA.

C. Primitive and Unconfined Recreation

Primitive recreation opportunities are outstanding on 33 acres (4 percent) of the ISA. The remaining 727 acres (96 percent) do not meet the criteria. As with opportunities for solitude, the best opportunities for primitive recreation are confined to the hikable route in the canyon of Coyote Gulch.

Opportunities for hiking, backpacking, horseback riding, and geological sight-seeing are outstanding in Coyote Gulch and are associated with contiguous GCNRA lands proposed for wilderness designation. The ISA canyon bottom is a short but integral portion of the Coyote Gulch hiking opportunity provided in the Escalante River drainage. The immediate canyon bottom and inner walls occupy approximately 33 acres of the ISA.

D. Special Features

Scenic features identified during the BLM wilderness inventory include the enclosed red Navajo Sandstone and sheer canyon walls associated with Coyote Gulch. An alcove-like natural arch is in Coyote Gulch. During the inventory, approximately 230 acres were identified as including special scenic features. Approximately 42 percent (319 acres) of the ISA is rated outstanding for scenic quality.

Peregrine falcons and bald eagles, which are listed as endangered species, may occasionally use the ISA. Seven other animal species and five plant species that are considered sensitive may occur, in the ISA. Refer to Appendix 4 and the

ESCALANTE CANYONS TRACT 5 INSTANT STUDY AREA

Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of the ISA would add a potential natural vegetation (PNV) ecosystem not presently represented in the NWPS. PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The ISA is in the Colorado Plateau Province/Ecoregion. The PNV in the ISA is blackbrush (760 acres).

The PNV in the ISA is not represented in the NWPS, although it is present in 11 other BLM study areas, all in Utah.

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The ISA is not within a 5-hour drive of any major population centers.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Blackbrush	0	0	11	229,304
UTAH (COLORADO PLATEAU PROVINCE)				
Blackbrush	0	0	11	229,304

Source: BLM File Data.

C. Balancing the Geographic Distribution of Wilderness Areas

The Escalante Canyons Tract 5 ISA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January 1987, the NWPS included 64 areas comprising 2,834,115 acres in Utah and Arizona.

There are eight designated wilderness areas within 100 miles of the ISA. In a clockwise direction beginning to the north area the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 45,000-acre Dark Canyon Wilderness (FS), the 112,000-acre Paria Canyon-

Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), and the 7,000-acre Ashdown Gorge Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Although the ISA is small, BLM would be capable of effectively managing it to preserve its intrinsic wilderness characteristics. As is done presently, the most effective management of backpacker visitor use is in concert with visitor

ESCALANTE CANYONS TRACT 5 INSTANT STUDY AREA

use management in the GCNRA portion of Coyote Gulch. There are no mineral leases, mining claims, in-held lands or other valid rights in the ISA that would complicate wilderness management. Livestock grazing would continue, but would not detract from wilderness management.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) studied the 760 acres recommended for wilderness designation and prepared a mineral assessment report for the Escalante Canyons Tract 5 ISA (USGS Bulletin 1747-B, Susan Bartsch-Winkler, et al., 1988). The report indicates that inferred sub-economic resources of decorative and dimension stone are present in the ISA. The mineral resource potential for undiscovered bentonite, oil, gas, and carbon dioxide is moderate. The mineral resource potential for undiscovered uranium is unknown. The mineral resource potential for undiscovered iron, cobalt, nickel, copper, lead, molybdenum, tin, cadmium, strontium, and vanadium is low, as is the potential for geothermal energy. The potential for undiscovered gypsum resources is low.

Impacts on Resources

The comparative impact table (Table 3) summarizes the effects of wilderness designation or nondesignation on wilderness values which are considered to be the only resource values that would be significantly affected.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of ISA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the ISA.

During formal public review of the Draft EIS, a total of 40 inputs specifically addressing this ISA were received from

52 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statement by the same commenter were not counted as additional inputs or signatures. Each individual counted as one commenter regardless of the number of inputs.

In general, 46 commenters supported wilderness designation for part or all of the ISA, while two commenters were opposed. Four commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented that the ISA contains significant wilderness values. The majority of those commenting in favor of wilderness were from other states. Of particular concern was the need to complement the proposed adjacent NPS wilderness (GCNRA).

Those opposing wilderness were concerned that wilderness would conflict with or preclude mineral exploration and development, livestock operations, flood control and water rights, public access, or other uses; is not compatible with multiple use; would harm State and local economies; and that designation is not necessary to protect the ISA.

One Federal agency, the NPS commented on the Draft EIS. The NPS concurred with the recommendation to designate the ISA as wilderness.

No comment letters were received on the Final EIS.

There are no State lands in the ISA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the ISA. The State considers the ISA to have high wilderness values and low conflicts.

The Kane County Commission is opposed to wilderness designation of the Escalante Canyons Tract 5 ISA and has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah.

ESCALANTE CANYONS TRACT 5 INSTANT STUDY AREA

The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that is not useable to the average visitor. In commenting on the Draft EIS the County stated that the ISA is too small to be considered as a wilderness area standing on its own merits. The County believes that the ISA should be considered for inclusion in the GCNRA under NPS guidelines and should not be included in the BLM wilderness process.

ESCALANTE CANYONS TRACT 5 ISA

Table 3
Comparative Summary of Impacts by Alternative

Alternatives

Recommendation
All Wilderness
(760 Acres)

No Action/No Wilderness

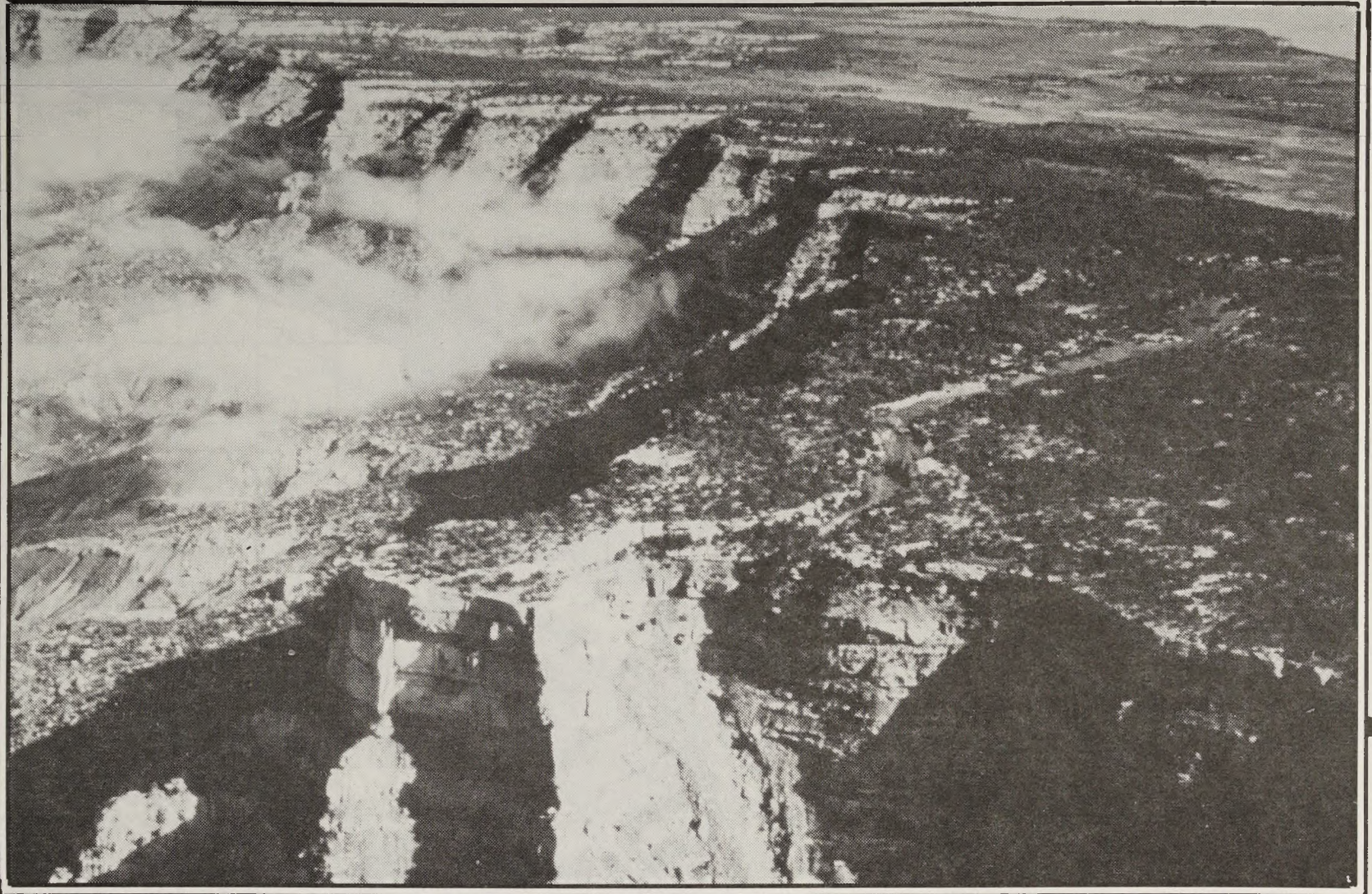
Issue Topic

Impacts on
Wilderness
Values

Wilderness designation would preserve the wilderness values of naturalness, outstanding opportunities for solitude and primitive recreation, and special features including Class A scenery, other special scenic features, and endangered or sensitive species, wherever these values occur in the ISA.

Wilderness values would not be protected by wilderness values. However, no disturbance is expected in the foreseeable future that would affect wilderness values.

Fifty Mile
Mountain WSA



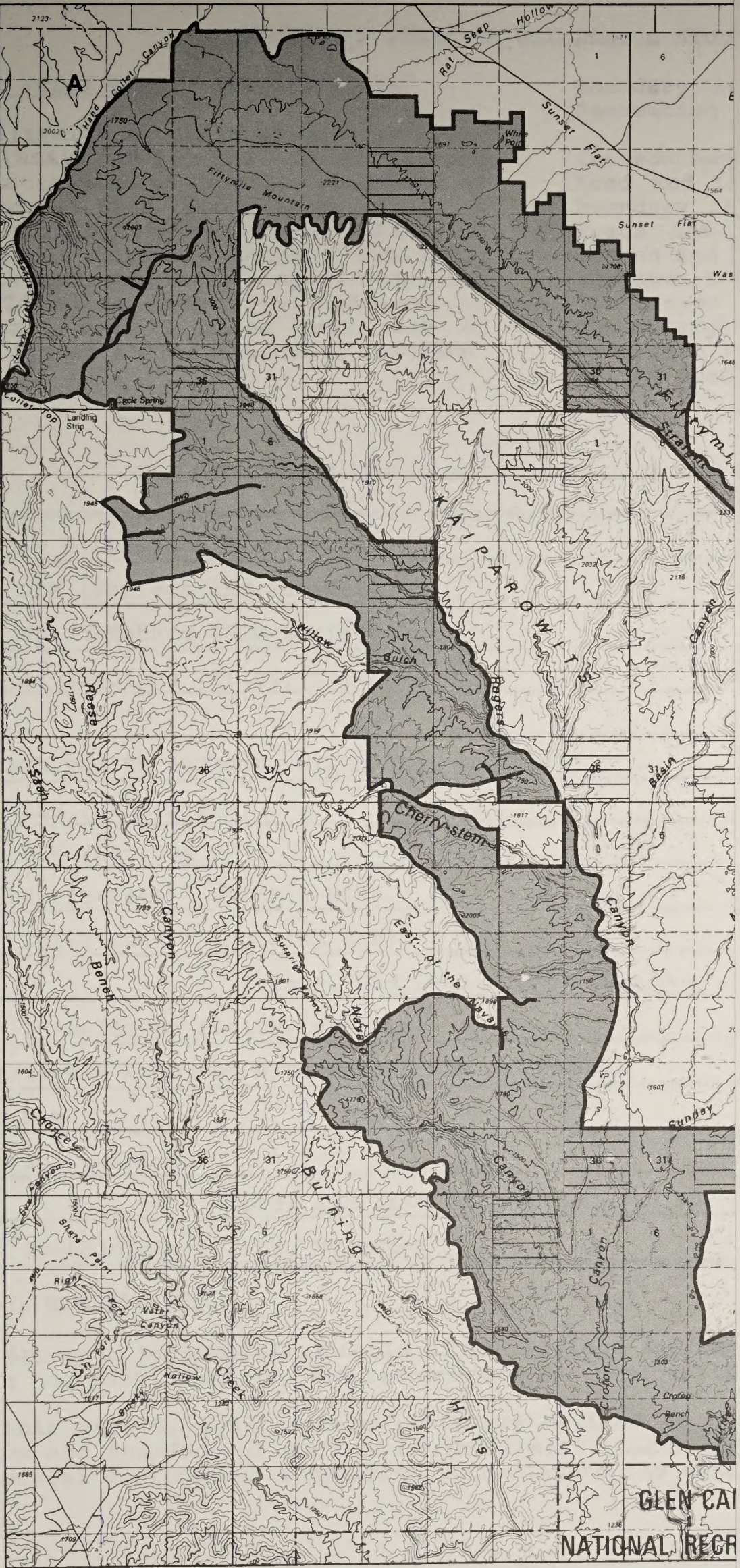
FIFTY MILE

T. 38 S.

T. 39 S.

T. 40 S.

T. 41 S.



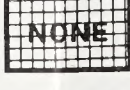


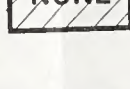


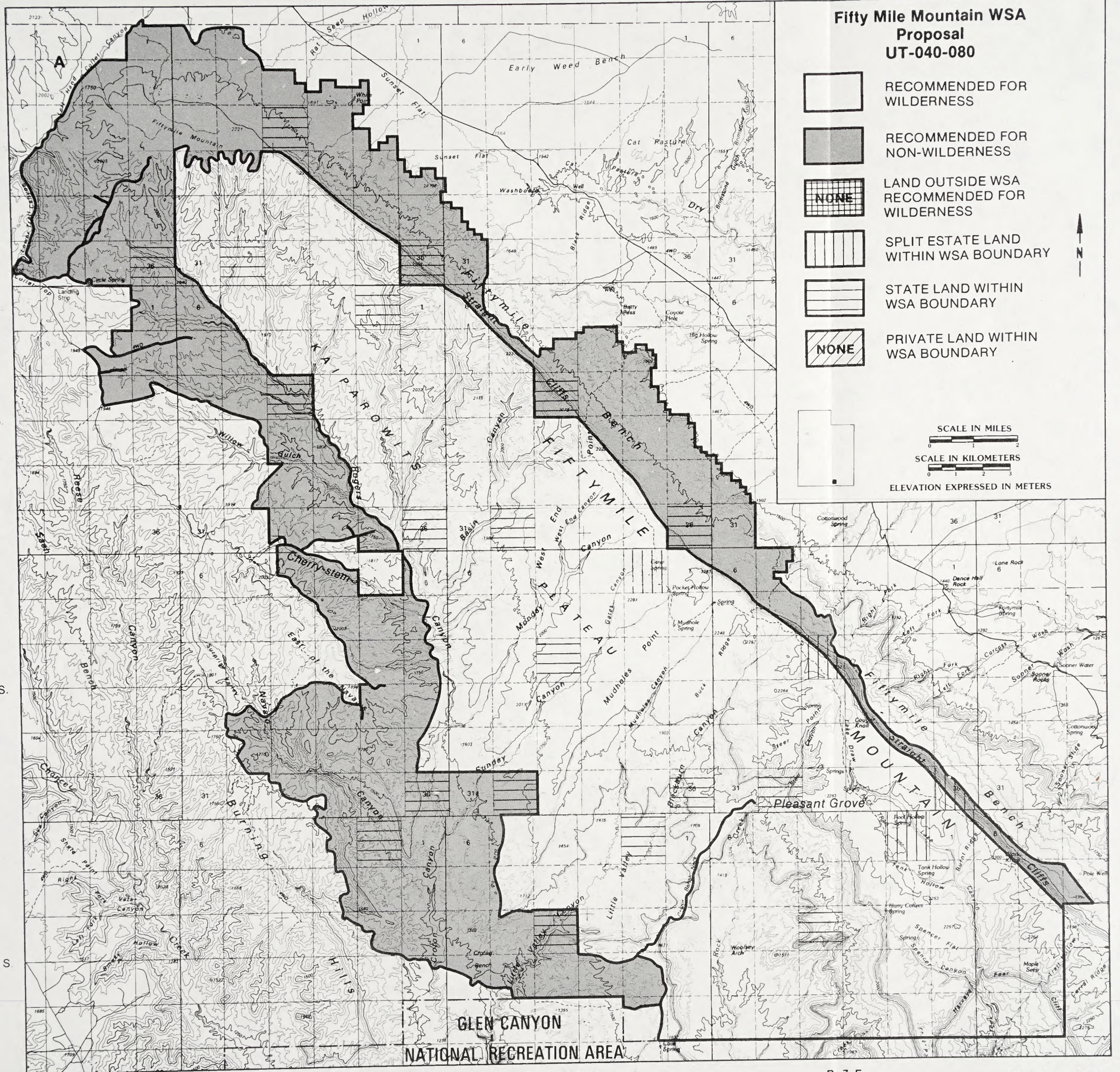
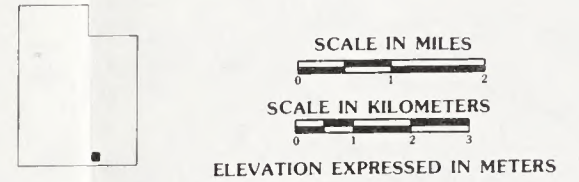
R. 4 E.

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FIFTY MILE MOUNTAIN WSA

Fifty Mile Mountain WSA Proposal UT-040-080

-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE
LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  STATE LAND WITHIN WSA BOUNDARY
-  NONE
PRIVATE LAND WITHIN WSA BOUNDARY



T. 38 S.

T. 39 S.

T. 40 S.

T. 41 S.

R. 4 E.

R. 5 E.

R. 6 E.

R. 7 E.

October 1991

FIFTYMILE MOUNTAIN WILDERNESS STUDY AREA

1. THE STUDY AREA: 146,143 acres

The Fiftymile Mountain Wilderness Study Area (WSA) (UT-040-080) is in eastern Kane County, about 20 miles southeast of Escalante, Utah (population 652). A small portion (90 acres) of the WSA is located in Garfield County. The study area is an irregularly shaped, elongated unit 24 miles long from northwest to southeast and 12 miles from east to west. Almost all of the WSA's southern

boundary is the Glen Canyon National Recreation Area (GCNRA).

The southwestern boundary is the Croton Road and the remainder of the western boundary is formed by coal exploration roads and State lands in the Rogers Canyon and East of the Navajo areas. The northern boundary is the Left Hand Collet Canyon road. To the east and below the Straight Cliffs, the boundary is the Fiftymile Bench road to the Left Hand Collet Road.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA^a**

WITHIN WILDERNESS STUDY AREA	ACRES
BLM (surface and subsurface)	146,143
Split-Estate (BLM surface only) ^b	2,659
In-holdings (State, Private)	12,341
Total	161,143
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within WSA)	91,361
BLM (outside WSA)	0
Split-Estate (within WSA)	2,659
Split-Estate (outside WSA)	0
Total BLM land recommended for wilderness	94,010
In-holdings (State, private)	5,849
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	54,782
Split-Estate	0
Total BLM land not recommended for wilderness	54,782
In-holdings (State, Private)	6,492

Source: BLM File Data

^a The Appendix is a detailed table of in-holdings and/or split-estate tracts included within the portion of the WSA recommended for designation.

^b In this report, split-estate lands are defined as only those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface are classified according to the owner of the surface.

FIFTYMILE MOUNTAIN WILDERNESS STUDY AREA

The WSA boundary is in small legal subdivisions that separate the disturbed areas below the Fiftymile Bench from those areas possessing the naturalness characteristic. The exception is in the area above Cat Pasture where the boundary extends to the base of the Straight Cliffs along the imprints created by uranium exploration activities. The WSA boundary includes two cherrystems on Grand Bench Neck and at the head of Rogers Canyon. (see Map). The WSA contains 146,143 acres of public land administered by the Bureau of Land Management (BLM).

Nineteen State sections (12,341 acres) and 4 sections (2,659 acres) of split-estate land (Federal surface and State minerals) are in the WSA (see Table 1). Thirteen State sections (5,849 acres) and all of the 2,659 acres of split-estate land are within the area recommended for wilderness designation. No private lands are in the study area (see Table 1).

The WSA includes all of Fiftymile Mountain at the southeastern edge of the Kaiparowits Plateau. The northeastern edge of Fiftymile Mountain is a 2,000-foot escarpment called the Straight Cliffs. The WSA is characterized by both rugged and remote, dissected canyons and plateau surfaces and ranges in elevation from 4,000 feet in the southern portion of the area to 7,586 feet at the crest of the Straight Cliffs. The predominant vegetative cover is pinyon-juniper woodland. Some aspen grows on the highest portion of Fiftymile Mountain. Desert shrub and sagebrush are found in the lower elevations.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November, 1990. Four alternatives were analyzed in the EIS: a partial wilderness alternative where 91,361 acres would be designated as wilderness and the remaining 54,782 acres would be released for uses other than wilderness, which is the recommendation in this report, a no wilderness (no action) alternative, an all wilderness alternative, and a smaller partial wilderness alternative of 51,540 acres.

2. RECOMMENDATION AND RATIONALE:

91,361 acres
(recommended for wilderness)
54,782 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 91,361 acres as wilderness and to release the remaining 54,782 acres for uses other than wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however would be implemented in a manner which would utilize all practical means to avoid or minimize environmental impacts.

All of the WSA is in a natural state. Approximately three-fourths of the portion of the WSA recommended for wilderness designation exhibits outstanding opportunities both for solitude and for primitive recreation. Areas recommended for designation that possess outstanding opportunities include the Fiftymile Mountain plateau, the rugged Rogers Canyon-Basin Canyon area, the Straight Cliffs escarpment, Little Valley, and the basin of Rock Creek. About 15 percent of the recommended area boundary is along the eastern edge of the Kaiparowits coal field as it is delineated by the Kaiparowits Known Recoverable Coal Resource Area (KRCRA). No significant conflicts exist with other resources or uses. Wilderness values are considered to have precedence over mineral extraction and nonwilderness uses in the recommended portion of the WSA. The partial wilderness alternative comprises about 63 percent of the WSA.

Certain locations in the area recommended for nonwilderness lack outstanding opportunities for solitude or for primitive recreation. Included in the area not recommended for wilderness are the benches west of Rogers Canyon, Navajo Canyon and the Croton Canyon Basin, and areas below the Straight Cliffs. Areas recommended for nonwilderness include the Kaiparowits KRCRA and other acreage under coal lease with pre-existing rights. Although coal mining is not expected in the short term, the option for future mining is significant. Uranium deposits may exist in eastern part of

FIFTYMILE MOUNTAIN WILDERNESS STUDY AREA

the area recommended for nonwilderness. In the area not recommended for wilderness designation, mineral potential outweighs the wilderness values.

3. CRITERIA CONSIDERED IN DEVELOPING THE PARTIAL WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Overall, the entire 146,143-acre WSA meets the criteria for naturalness although some evidence of human activity exists. The most significant aspect of naturalness in this large WSA is the presence of the Fiftymile Mountain plateau. The Fiftymile Mountain is believed to be the largest unroaded plateau in the Southwest. It is this undisturbed island-in-the-sky attribute that imparts a special significance to the naturalness in the WSA. Imprints of man in the WSA include a vehicular way 6 miles long from an abandoned airstrip on Grand Bench Neck into the Rock Creek drainage; several fences, totalling about 7 miles; a developed spring; and three cabins, two on Fiftymile Mountain and one in Rogers Canyon. These imprints combined total about 100 acres, or less than 0.1 percent of the WSA, and are substantially unnoticeable.

Since establishment of the WSA, approximately 9 acres of the WSA have been disturbed as a result of an Exxon uranium drilling project on BLM and State lands in 1980. The drilling activity was east of Rogers Canyon and included approximately 8.5 acres of road development and 0.5 acre of drill pads and mud pits. All work was completed as described in the approved Plan of Operations. These areas have been reclaimed to a substantially unnoticeable condition.

B. Solitude

Overall, approximately 69,000 acres of the WSA have outstanding opportunities for solitude and 77,143 acres do not.

The portion recommended for wilderness designation includes approximately 65,000-acres (95 percent) of the 69,000-acres in the WSA possessing outstanding opportunities for solitude.

The WSA has outstanding opportunities for solitude because of isolation due to topography, the size of the WSA, and terrain. The configuration of the WSA neither enhances nor detracts from the outstanding opportunities present.

The Fiftymile Mountain plateau is isolated from the remainder of the WSA by encircling cliffs including the Straight Cliffs; the cliffs of the Dry Rock Creek, Rock Creek, and Little Valley Creek basins; and the walls of Sunday, Monday, and Basin canyons. The top of Fiftymile Mountain is a tableland. Screening exists where canyons cut into the tableland, and on the points between canyons where numerous outcrops, ledges, and draws exist.

Outstanding opportunities for solitude exist in The Rogers Canyon drainage, Little Valley Creek Basin, and Rock Creek Basin. In the Rogers Canyon drainage, the terrain is deeply dissected between Rogers Canyon and the Straight Cliffs. The remnant benches provide outstanding opportunities for solitude because they are isolated by the canyons and the Straight Cliffs and screening exists on several benches because of extensive rock outcrops. Immediately north and west of the Rogers Canyon-Left Hand Collet Canyon divide several canyons that are tributaries to Left Hand Collet Canyon provide solitude. Canyons in the Little Valley Creek and Rock Creek Basins provide outstanding opportunities for solitude because they are narrow, winding, slot-like canyons.

The Straight Cliffs provide outstanding opportunities for solitude in areas where the upper cliff face has moist alcoves where aspen and shrubby vegetation provide screening.

Sights and sounds of human activities are not apparent from most places within the WSA. From the top of the Straight Cliffs, vehicular activity on the Hole-in-the-Rock Road can be observed. From the western rim between Spencer Point to

FIFTYMILE MOUNTAIN WILDERNESS STUDY AREA

Mudholes Point, boating activity on Lake Powell and the plume from the Navajo Powerplant are visible.

C. Primitive and Unconfined Recreation

Overall, opportunities for primitive recreation are outstanding on 67,000 acres. The remaining 79,143 acres of the WSA have less than outstanding opportunities for primitive recreation. The WSA has outstanding opportunities for hiking, backpacking, horseback riding, photography, and sightseeing. The portion recommended for wilderness designation includes approximately 63,000 acres (94 percent) of the 67,000 acres in the WSA possessing outstanding opportunities for solitude.

The Fiftymile Mountain plateau from West End Point south to Fiftymile, Navajo, and Spencer Points in Glen Canyon NRA is a frequent destination for backpackers and horseback riders. The Fiftymile Mountain is the highest large land mass in the lower Glen Canyon region, and is a landscape with a climate unique to the region. The vegetation is predominantly pinyon-juniper but it includes aspen and isolated stands of Ponderosa pine. Water sources are adequate for backpacking and horseback activities.

Opportunities for sightseeing and photography are outstanding along the Straight Cliffs rim and on the west rim, where there are unobstructed views of the Escalante River canyons, Lake Powell, and Navajo Mountain. The plateau portion of the WSA provides backpacking and sightseeing opportunities to a degree not often equalled in the lower Glen Canyon region.

Archaeological sites are numerous on the top of the Fiftymile Mountain and in the bordering cliffline. The terrain is not difficult to traverse on top and archaeological sightseeing has significant potential.

The dissected region between the Straight Cliffs and Rogers Canyon provides opportunities for challenging backpacking trips because the terrain is very difficult to traverse and water is lacking.

The bench below the Fiftymile Mountain between Steer Canyon and Navajo Point in the Glen Canyon NRA provides spectacular views and outstanding opportunities for sightseeing and photography.

D. Special Features

The WSA is best known as a location for viewing the panoramas of the lower Glen Canyon region. Features that can be viewed from the Fiftymile Mountain WSA include Lake Powell, Navajo Mountain-Rainbow Plateau, Glen Canyon, and the canyonlands of the Escalante River.

Fiftymile Mountain is unique in the sense that the plateau is the only island of green in the midst of red and yellow canyonlands and Lake Powell. Aspen in Pleasant Grove, Steer Canyon, and Pinto Mare Canyons contribute to the aesthetic landscape. The "Garden" on the west rim is a scenic area. Window Wind Arch above the Middle Trail is scenic because it is at the very edge of the Straight Cliffs. The Straight Cliffs escarpment is a major landmark in south-central Utah and is an important scenic feature viewed from the Hole-in-the-Rock road. Similarly, the west rim cliff from Spencer Point to Mudhole Point is a scenic feature as viewed from Lake Powell.

Peregrine falcons and bald eagles, which are listed as endangered species, occasionally use the WSA. The WSA has a population of cougar. Nine other animal species and seven plant species that are considered sensitive occur, or may occur, in the WSA. Refer to Appendix 4 and the Affected Environment, Wildlife Including Special Status Species section of the Utah BLM Statewide Wilderness EIS for additional information.

The WSA contains a 47,325-acre archaeological district that has been nominated to the National Register of Historic Places. The district has both historical and scientific importance. Archaeology on Fiftymile Mountain was a major subject of investigation during the conduct of the Glen Canyon Archaeological Salvage Project. The WSA is part of an area

FIFTYMILE MOUNTAIN WILDERNESS STUDY AREA

from which past occupational patterns and chronologies in the greater Glen Canyon region can be determined. Because of its scientific value, the archaeology of the WSA also has educational value. In the past, the scientific investigation of this resource has involved student participation from Utah institutions of higher education. Future investigations would undoubtedly involve student participation from universities in the region.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS, but it would augment the diversity of the NWPS by adding an ecosystem (salt-bush-greasewood) which is now represented in only one wilderness area, also in Utah.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is juniper-pinyon woodland (102,243 acres) and saltbush-greasewood (43,800 acres).

This particular combination of potential natural vegetation ecosystems is not represented in the NWPS either nationally or in Utah.

This information is summarized in Table 2, from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is not within a 5-hour drive of any major population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Fiftymile Mountain WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January, 1987, the NWPS included 64 areas comprising 2,834,115 acres in Utah and Arizona.

There are eight designated wilderness areas within 100 miles of the WSA.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,041,662
Saltbush-Greasewood	1	20,000	17	350,203
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,603,855
Saltbush-Greasewood	1	20,000	17	350,203

Source: BLM File Data.

FIFTYMILE MOUNTAIN WILDERNESS STUDY AREA

In a clockwise direction beginning to the north are the 26,000-acre Box-Death Hollow Wilderness (Forest Service [FS]), the 45,000-acre Dark Canyon Wilderness (FS), the 112,000-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 6,860-acre Cottonwood Point Wilderness (BLM), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 40,600-acre Saddle Mountain Wilderness (FS), and the 7,000-acre Ashdown Gorge Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

The WSA, including the portion recommended for wilderness, can be managed as wilderness to preserve the values present in the area.

Even though there are 40 acres in a post-FLPMA oil and gas lease in the recommended part of the WSA, it is subject to nonimpairment of wilderness values and it is expected that this lease would expire and would not be renewed if the area is designated as wilderness. There are 160 acres of mining claims in the portion of the WSA recommended for wilderness. It is expected that a portion of these and future claims existing at the time of designation would be explored for uranium in the foreseeable future. However, the amount of disturbance would be small and would not affect overall manageability of the wilderness.

Provision of access to nine in-held sections of State land and four sections of split-estate land with State minerals in the recommended portion of the WSA could complicate wilderness management in the long-term future. However, none of the State lands in the recommended area are leased for coal and development is not projected. Therefore, new access roads to the State land likely would not be required through the area following wilderness designation.

Livestock grazing and maintenance of existing facilities would continue, but would not significantly affect the wilderness values of the WSA.

Management of wilderness in the area not recommended would be more difficult than

management of the recommended area. This area not recommended has known coal resources and includes 7,505 acres of existing coal leases. It is expected that if the WSA is designated as wilderness, existing coal leases would expire and would not be renewed. However, there are ten sections of State land inheld in the nonrecommended area and over the long-term future there likely would be a need for access roads through the wilderness. Additionally, development of coal on State lands would reduce the quality of wilderness values in the nonrecommended area.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Fiftymile Mountain WSA (USGS Bulletin 1747-A, Susan Bartsch-Winkler, et al, 1988). The report indicates that no economic or marginally economic resources were identified in the study area. Subeconomic resources of sandstone, sand, and gravel are inferred, however. All or part of four lode and one placer claim blocks have been staked within the study area, located either for uranium or titanium.

The mineral resource potential for coal and undiscovered titanium resources is high, except in the southwesternmost part of the study area, where there is no potential for either commodity. The mineral resource potential for uranium is high in the north-central part and the southeastern tip of the area and moderate elsewhere. The potential for other undiscovered metals is low. The potential for undiscovered geothermal, oil, gas, gypsum, and carbon dioxide resources is moderate.

Impacts on Resources

The comparative impact table (Table 3) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

With BLM's recommendation, the portion of the WSA with the highest potential for long-term mineral development would

FIFTYMILE MOUNTAIN WILDERNESS STUDY AREA

not be designated as wilderness. The recommended action would not result in a loss of local employment or income.

Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development in the long term. With coal development in the long term, there would be major beneficial and adverse economic effects in Garfield and Kane counties.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 102 inputs specifically addressing this WSA were received from 397 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statement by the same commenter were not counted as additional inputs or signatures. Each individual counted as one commenter regardless of the number of inputs.

In general, 108 commenters supported wilderness designation for part or all of the WSA, while 282 of the commenters were opposed to wilderness designation. Seven commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented on the special features in the WSA, lack of conflict with mineral-related activities, and that the WSA contains wilderness values. Those commenting in favor of wilderness were about equally from urban Utah and from other states. Of particular concern was the need to protect cultural values.

Those opposing wilderness were concerned that wilderness would conflict with or preclude mineral exploration and development, livestock operations, flood control and water rights, public access, or other uses; is not compatible with

multiple use; would harm State/local economy; and that designation is not necessary to protect the WSA. The great majority of those opposed were from rural Utah.

Two Federal agencies, the NPS and the USBM commented on the Draft EIS. The NPS stated that the all wilderness alternative would be preferred over the 51,540-acre partial wilderness alternative. The USBM did not take a position regarding designation or nondesignation but commented that BLM had understated the petroleum potential of the Fiftymile Mountain WSA.

No comment letters were received on the Final EIS.

There are 19 sections (12,341-acres) of State land and 2,659-acres of split-estate with State minerals in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State considers the Fiftymile Mountain to have both high wilderness values and conflicts. The State suggested that within the entire area of the WSA, potential conflicts with coal, uranium, and oil and gas development could occur.

The Kane and Garfield County Commissions are opposed to wilderness designation of the Fiftymile Mountain WSA and have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM land in Utah.

The Kane County Master Plan rejects wilderness as an exclusionary form of recreation that cannot be used by the average visitor. Garfield County previously proposed to the Utah Congressional Delegation that 111,053 acres of BLM lands in three WSAs and 31,600 acres in one FS unit in the county be recommended as wilderness. The Garfield County Master Plan recommends that the remaining lands in the county, including the Fiftymile Mountain WSA, be retained for multiple use.

In commenting on the Draft EIS, the counties stated that the known coal and uranium deposits in the WSA are essen-

FIFTYMILE MOUNTAIN WILDERNESS STUDY AREA

tial to the long-term development of the region and that the areas of outstanding scenic values can be protected under current regulations as evidenced by the Fiftymile Mountain Archaeological District, already in existence.

FIFTY MILE MOUNTAIN WSA

Table 3
Comparative Summary of Impacts by Alternative

Alternatives	
Issue Topic	Recommendation
Impacts on Wilderness Values	<p>Large Partial Wilderness (91,361 Acres)</p> <p>Wilderness values would be preserved overall in the designated area which is approximately 63 percent of the WSA. In the short term, disturbance from uranium, exploration, vegetation treatments, rangeland projects, and from providing access to State in-holdings would result in a loss of wilderness values mostly in the nondesignated area. Naturalness and opportunities for solitude and primitive recreation would be directly lost on 1,537 acres and would be reduced in quality on up to an additional 14,600 acres. Some Class A scenery would be reduced in quality in directly and indirectly impacted areas. Most (99 percent) of the impact would be in the nondesignated area. Vehicular use of 6 miles of existing ways and future roads in the nondesignated portion would detract from opportunities for solitude and primitive recreation in the WSA. Long-term loss of wilderness values from coal development would be the same as described for the No Action/No Wilderness Alternative.</p>
	<p>No Action/No Wilderness</p> <p>Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the short term, disturbance from uranium exploration, vegetation treatments, rangeland projects, and from providing access to State in-holdings would result in the loss of wilderness values. Naturalness and opportunities for solitude and primitive recreation would be directly lost on approximately 3,046 acres and indirectly reduced in quality on up to an additional 30,000 acres. Class A scenery would be reduced in quality in directly and indirectly impacted areas. Vehicular use of 6 miles of existing ways and future exploration and access roads would detract from opportunities for solitude and primitive recreation in the WSA. Coal development over the long term would result in a direct loss of wilderness values on 60 acres and an indirect reduction in wilderness quality on about 14,600 acres.</p>
	<p>All Wilderness (146,143 Acres)</p> <p>Wilderness designation would preserve wilderness values overall in the WSA. In the short term, disturbance from uranium exploration, rangeland projects, and from providing access to State in-holdings would result in a loss of wilderness values. Naturalness and opportunities for solitude and primitive recreation would be directly lost on about 26 acres and indirectly reduced in quality on up to about an additional 2,900 acres. Special features would be preserved overall, although some Class A scenery would be reduced in quality in direct an indirect disturbance areas.</p>
	<p>Small Partial Wilderness (51,540 Acres)</p> <p>Wilderness values would be preserved overall in the designated area which is approximately 35 percent of the WSA. Loss or reduction in quality of wilderness values from uranium exploration, vegetation treatments, rangeland projects, from providing access to State in-holdings and from continued vehicular activity in the short term, and from coal development in the long term would result in the same impacts to wilderness values as the No Action/No Wilderness Alternative. About 99 percent of the impact would be in the non-designated area</p>

FIFTY MILE MOUNTAIN WSA

Table 3 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
Recommendation		No Action/No Wilderness	All Wilderness	Small Partial Wilderness
Issue Topic	Large Partial Wilderness (91,361 Acres)		(146,143 Acres)	(51,540 Acres)
Impacts on Vegetation	Special status plant species would not be significantly affected. About 1.8 percent (1,537 acres) of the pinyon-juniper woodland type would be converted to a grass-shrub type.	Disturbance would not result in significant impacts to special status species. About 3.5 percent of the pinyon-juniper woodland type in the WSA would be converted to a grass-shrub type; therefore, there would not be significant changes in vegetation types in the WSA.	Implementation of the All Wilderness Alternative would not significantly affect the vegetation resource in the WSA. Vegetation types and special status plant species would be protected because potential disturbance would be reduced to 26 acres.	There would be the same impacts as described for the No Action/No Wilderness Alternative because the projected activities and surface disturbance would be the same.
Impacts on Mineral and Energy Exploration and Production	The coal resource is located in the non-designated portion of the WSA and could be developed in the long term. Loss of development and exploration opportunities for other mineral and energy resources would not be significant because the probability of development is low even if a portion of the WSA is not designated wilderness.	Implementation of this alternative would not adversely affect mineral exploration or production because minerals could be claimed, leased, and developed as at present.	Wilderness designation would preclude development of about 73.5 million tons of recoverable coal development. Loss of exploration and development opportunities for other mineral and energy resources would not be significant because the probability of development is low even if the WSA is not designated wilderness.	The impacts would be the same as with the No Action/No Wilderness Alternative.
Impacts on Wildlife Habitat and Populations	Wildlife habitat and populations including special status species would not be significantly affected. Overall development of the springs and vegetation treatments would benefit wildlife by providing additional water, forage, and ecotones. Approximately 1 percent (1,537 acres) of the wildlife habitat in the WSA would be disturbed.	Wildlife habitat and populations including special status species would not be significantly affected. Implementation of the water and vegetation treatment projects would benefit wildlife by providing additional water, forage, and ecotones. Overall, about 2.1 percent (3,106 acres) of the wildlife habitat in the WSA would be disturbed.	Wilderness designation would preclude 3,000 acres of vegetation treatments designed to improve wildlife habitat but would protect all species provide additional opportunities for solitude. Approximately 0.02 percent (26 acres) of the wildlife habitat in the WSA would be disturbed.	There would be the same impacts as described for the No Action/No Wilderness Alternative.

FIFTY MILE MOUNTAIN WSA

Table 3 (Continued)
Comparative Summary of Impacts by Alternative

		Alternatives		
Issue Topic	Recommendation Large Partial Wilderness (91,361 Acres)	No Action/No Wilderness	All Wilderness (146,143 Acres)	Small Partial Wilderness (51,540 Acres)
Impacts on Livestock Management	Impacts on livestock management would be about the same as with the No Action/No Wilderness Alternative because existing access and grazing levels would not be affected and proposed projects would be allowed.	Little affect on the management of livestock is projected with this alternative because grazing levels, access, and management practices would remain as at present.	Little affect on the management of livestock is projected with this alternative. Restrictions on motorized use of 6 miles of way would slightly increase management costs and inconvenience to 18 permittees.	Impacts on livestock management would be about the same as with the No Action/No Wilderness Alternative because existing access and grazing levels would not be affected and proposed projects would be allowed.
Impacts on Cultural Resources	Cultural resources including 392 of the 400 recorded sites would be protected by wilderness designation, although certain cultural resource management practices. Some impact to sites in the nondesignated area (37 percent of the WSA) is expected, but all sites would continue to be protected under existing laws.	Projected short-term and long-term surface development activities may impact significant cultural resources. All sites in the unit would continue to receive protection under existing laws. The unit would continue to be open to vehicular access, but impacts to cultural resources is expected to be minimal because there is little use of ORVs in the WSA. Vandalism may increase due to the attractive nature of the resources present. Cultural resources could be managed with regard for preservation of other wilderness values.	Surface disturbance is expected to be minimal, therefore cultural resources including 400 recorded sites would be protected from most intentional and unintentional damage. Increased recreational use may increase certain types of vandalism. Cultural resource management may be restricted in scope and execution due to wilderness designation.	Cultural resources including 384 of the 400 recorded sites would be protected by wilderness designation, although wilderness management may restrict certain cultural resource management practices. Some impact to sites in the nondesignated area (65 percent of the WSA) is expected but all sites would continue to be protected under existing laws.

FIFTY MILE MOUNTAIN WSA

**Table 3 (Continued)
Comparative Summary of Impacts by Alternative**

		Alternatives		
Issue Topic	Recommendation Large Partial Wilderness (91,361 Acres)	No Action/No Wilderness	All Wilderness (146,143 Acres)	Small Partial Wilderness (51,540 Acres)
Impacts on Economic Conditions	Impacts would be about the same as with the No Action/No Wilderness Alternative because coal development and related impacts would occur.	No loss of local employment or income would occur. Federal and State revenues would not be reduced. Economic opportunities could be realized through mineral and energy resource exploration and eventual development of coal in the long term. There would be major beneficial and adverse impacts in Garfield and Kane Counties.	Wilderness designation would not significantly affect present local or regional economic conditions. However, new leasing in the WSA would not be allowed. Therefore, potential sales and revenues from leasable minerals (coal) would be foregone. Over the long term, coal development and associated beneficial and adverse economic impacts would not occur. This would significantly change future economic conditions in Garfield and Kane Counties from what they would be without wilderness designation.	Impacts would be about the same as with the No Action/ No Wilderness Alternative because coal development and related impacts would occur.

FIFTY MILE MOUNTAIN WILDERNESS STUDY AREA

Appendix
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation ^a

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners (If Parcel has been subdivided)	Type of Ownership by Estate (Federal, State, Private, Other) (Surface Estate) (Subsurface Estate)	Presently Proposed for Acquisition (Yes, No)	Preferred Method of Acquisition (Purchase, Exchange, Other)	Estimated Cost of Acquisition (Land Costs)	Estimated Cost of Acquisition (Processing Costs)
T. 38 S., R. 5 E., Sec. 32	640.00		State	Nb	Exchange		\$2,000
T. 39 S., R. 5 E., Sec. 2	640.44		State	Nb	Exchange		\$2,000
T. 39 S., R. 5 E., Sec. 36	640.00		State	Nb	Exchange		\$2,000
T. 39 S., R. 6 E., Sec. 32	640.00		State	Nb	Exchange		\$2,000
T. 40 S., R. 6 E., Sec. 2	641.00		Federal	Nb	Exchange		\$2,000
T. 40 S., R. 6 E., Sec. 16	640.00		State	Nb	Exchange		\$2,000
T. 40 S., R. 6 E., Sec. 36	640.00		State	Nb	Exchange		\$2,000
T. 40 S., R. 7 E., Sec. 16	640.00		Federal	Nb	Exchange		\$2,000
T. 40 S., R. 7 E., Sec. 32	640.00		State	Nb	Exchange		\$2,000
T. 40 S., R. 7 E., Sec. 36	640.00		Federal	Nb	Exchange		\$2,000
T. 41 S., R. 5 E., Sec. 2	729.00		State	Nb	Exchange		\$2,000
T. 41 S., R. 7 E., Sec. 2	737.76		Federal	Nb	Exchange		\$2,000
T. 41 S., R. 7 E., Sec. 16	640.00		State	Nb	Exchange		\$2,000

^a The estimated costs listed in this appendix in no way represent a Federal appraised value of the land or mineral estate, but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring non-Federal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

Red Butte
WSA



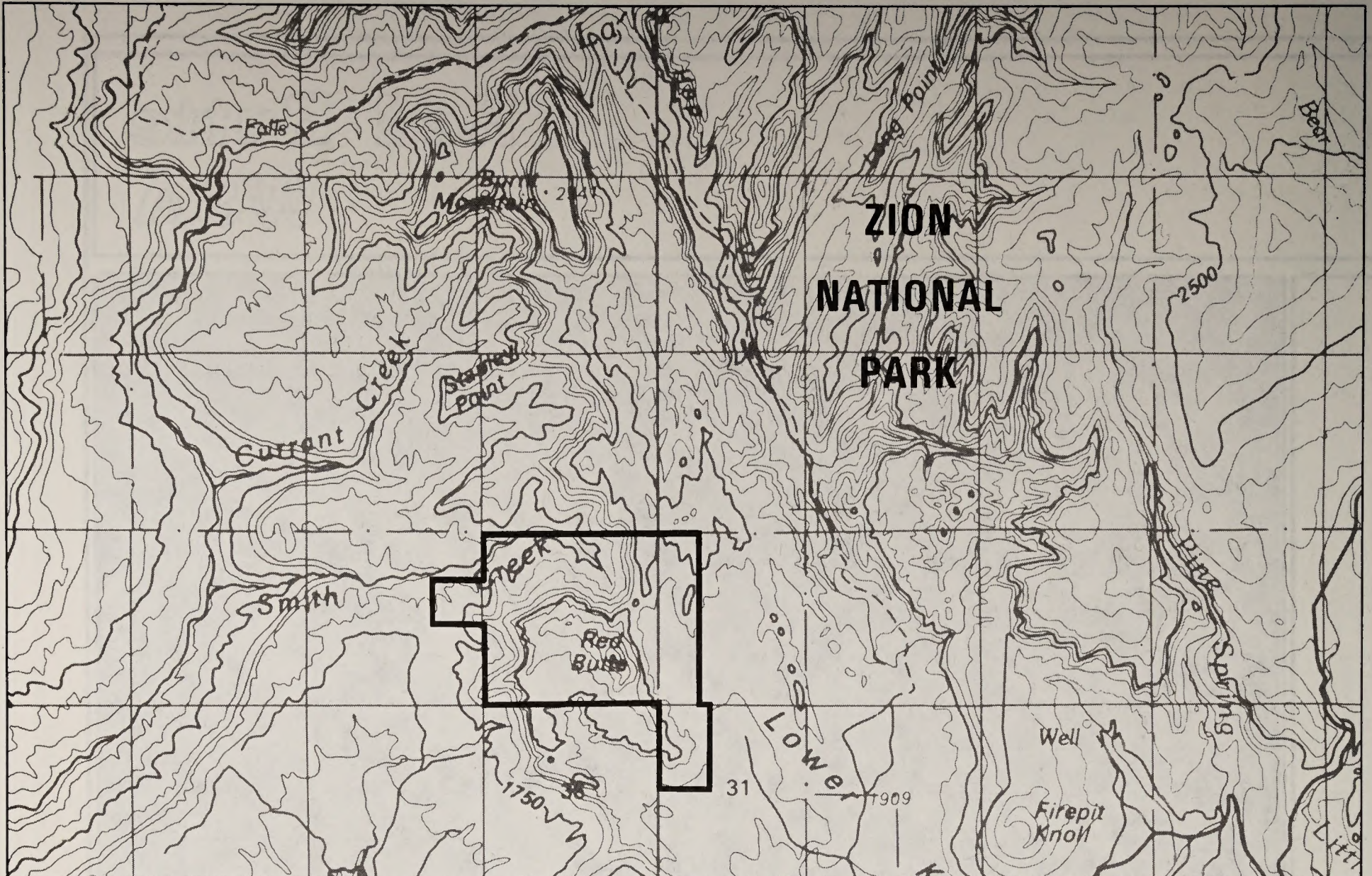
RED BUTTE WSA

R. 12 W.


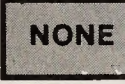

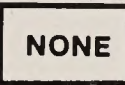
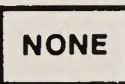
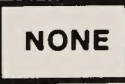
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T. 39 S.

T. 40 S.

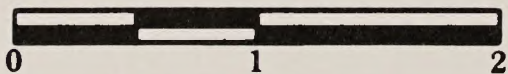


Red Butte WSA Proposal UT-040-147

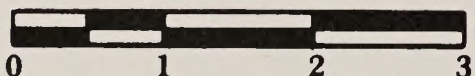
-  RECOMMENDED FOR WILDERNESS
-  NONE RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS



RED BUTTE WILDERNESS STUDY AREA

1. THE STUDY AREA: 804 acres

The Red Butte Wilderness Study Area (WSA) (UT-040-147) is in eastern Washington County, about 12 miles north of Virgin, Utah (population 169). The study area extends about 1.5 miles from north to south and 1 mile from east to west (see Map). Zion National Park including a National Park Service (NPS) endorsed wilderness proposal of 120,620 acres, adjoins the WSA on the north side, a State section adjoins the unit on the south side, and private land encloses the WSA on the east and west.

The WSA contains 804 acres of public lands administered by the Bureau of Land Management (BLM). There are no private, State, or split-estate lands within the WSA (see Table 1). The WSA is in the White Cliffs of the Grand Staircase, the terraced southern margin of the High Plateaus Section of the Colorado Plateau Physiographic Province. A prominent red sandstone butte gives the WSA its name. Elevations in the WSA range from 5,500 feet to 7,200 feet on the summit of Red Butte. Shrubs, with some pine, juniper, and bunch grasses, are the dominant vegetation.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	804
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	804
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	804
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	804
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

The WSA was dropped from wilderness study status by the Secretary of the Interior on December 30, 1982 due to its small size, but because of its wilderness values and proximity to Zion

National Park, including a NPS-endorsed wilderness proposal of 120,620 acres, it was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM

RED BUTTE WILDERNESS STUDY AREA

Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this report, and a no wilderness (no action) alternative.

2. RECOMMENDATION AND RATIONALE:

804 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate the entire area as wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. Little or no conflict with other uses exists.

The WSA is small but can be effectively managed as wilderness. Although it is small, it is an extension of the high wilderness values found on adjacent NPS administered land in Zion National Park. Red Butte possesses exceptional scenery comparable in quality to the scenery of the adjacent Zion National Park. Red Butte stands alone as a landmark and is a feature not replicated within the scenic geology of the National Park

All of the WSA is natural. About 75 percent of the area has outstanding opportunities for solitude and 22 percent has outstanding primitive recreation.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The WSA is in a natural condition with no known intrusions. The WSA basically appears as an untouched red sandstone pyramid covered with mountain shrubs, scattered Ponderosa pine, pinyon and juniper trees. The WSA has outstanding scenic values equal

in quality to those of Zion National Park. The high quality of naturalness has not changed since BLM's intensive wilderness inventory.

B. Solitude

Outstanding opportunities for solitude are found on approximately 75 percent (603 acres) of the unit. The WSA's isolation, difficulty of access, and vegetative screening provide solitude. Red Butte, Smith Creek Canyon, and the mesa are the most isolated portions of the unit. Except for a small open park with ponderosa pine, the mesa is heavily vegetated with oak brush and other shrubs.

C. Primitive and Unconfined Recreation

Overall, outstanding opportunities for primitive and unconfined recreation can be found on approximately 180 acres (22 percent) of the WSA.

The Red Butte WSA offers outstanding opportunities for hiking in conjunction with Zion National Park. The WSA also offers outstanding opportunities for technical and nontechnical rock climbing and geologic study. Technical routes are challenging and the entire butte provides an outstanding climbing opportunity.

D. Special Features

All of the WSA is rated as outstanding for scenic quality. A jughandle style arch is found on one of its north-facing sandstone ridges. Red Butte has served as a scenic backdrop for movies and for television commercials. The endangered bald eagle and peregrine falcon, as well as 13 additional animal species and four plant species that are considered to be sensitive, occur or may occur in the WSA. Cougar also use the WSA. Although these species add to the wilderness values of the WSA, they are not confined to the Red Butte study area.

Refer to Appendix 4, and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Final EIS for additional information.

RED BUTTE WILDERNESS STUDY AREA

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS, but it would provide a small representation of an ecosystem (mountain mahogany-oak scrub) which is not now represented in the NWPS in Utah.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is

juniper-pinyon woodland (268 acres) and mountain mahogany-oak scrub (536 acres). Mountain mahogany-oak scrub PNV is represented in the NWPS in only one wilderness and juniper-pinyon woodland is represented in the NWPS in Utah in only one wilderness. This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Provo-Orem, Utah and Las Vegas, Nevada. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of these population centers.

**TABLE 2
ECOSYSTEM REPRESENTATION**

	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
BAILEY-KUCHLER CLASSIFICATION (PNV)				
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,143,737
Mountain Mahogany-Oak Scrub	0	0	4	31,325
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,705,930
Mountain Mahogany-Oak Scrub	0	0	4	31,325

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Provo-Orem, Utah	11	721,793	90	2,782,435
Las Vegas, Nevada	38	3,132,130	54	2,172,065

Source: BLM File Data.

RED BUTTE WILDERNESS STUDY AREA

C. Balancing the Geographic Distribution of Wilderness Areas

The Red Butte WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS includes 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,500 acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall the WSA could be effectively managed to preserve its wilderness character. In the event of a substantial increase in hiking or climbing demand for Red Butte, administration of visitor access could be difficult because much the WSA perimeter is along State and private lands. Because Red Butte is physically connected to Zion National Park by a relatively flat terrain, it is assumed that most of the present limited use originates in the National Park.

Two grazing permittees utilize 25 animal unit months (AUMs) of forage a year, and recreational visitors spend about 100 visitor days annually in the WSA. There are no private or State in-holdings to interfere with wilderness management, and there are no mineral leases, mining claims or other valid rights in the WSA.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM), prepared a mineral assessment report for the Red Butte WSA (USGS Bulletin 1746-E, R.E. Van Loenen, et al., 1989). The report indicates that the WSA has a moderate energy resource potential for oil and gas. The mineral resource potential is low for undiscovered resources of all metals, including silver and uranium, and for geothermal resources. There is no potential for coal or gypsum resources.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values. These values are considered to be the only pertinent resource that would be significantly affected by designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 27 inputs specifically addressing this WSA were received from 31 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 24 commenters supported wilderness designation for part or all of

RED BUTTE WILDERNESS STUDY AREA

the WSA, while three commenters were opposed. Four commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented that wilderness designation would complement proposed wilderness in adjacent Zion National Park. The majority of those commenting in favor of wilderness were almost evenly from rural and urban Utah and other states.

Those opposing wilderness were concerned that the WSA is too small to be a designated wilderness. All of those opposed were from rural Utah.

One Federal agency, the NPS, commented on the Draft EIS for the Red Butte WSA. The NPS supported wilderness designation for the WSA, provided information on the potential for endangered species in the area, and questioned changes in the oil and gas lease acreage in the WSA between 1982 and publication of the Draft EIS.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the Red Butte WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, The Watchman, Taylor Creek Canyon, Goose Creek Canyon and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study should be given to the potential of transferring most of these WSAs from BLM to NPS management. The BLM and NPS agree that transferral of administration is a separate issue, independent of the wilderness review.

The State also commented specifically on the use of the regional location map, and noted the mineral potential of the WSA is probably low. Information on deer winter range was provided and inconsistencies in the special features section were identified.

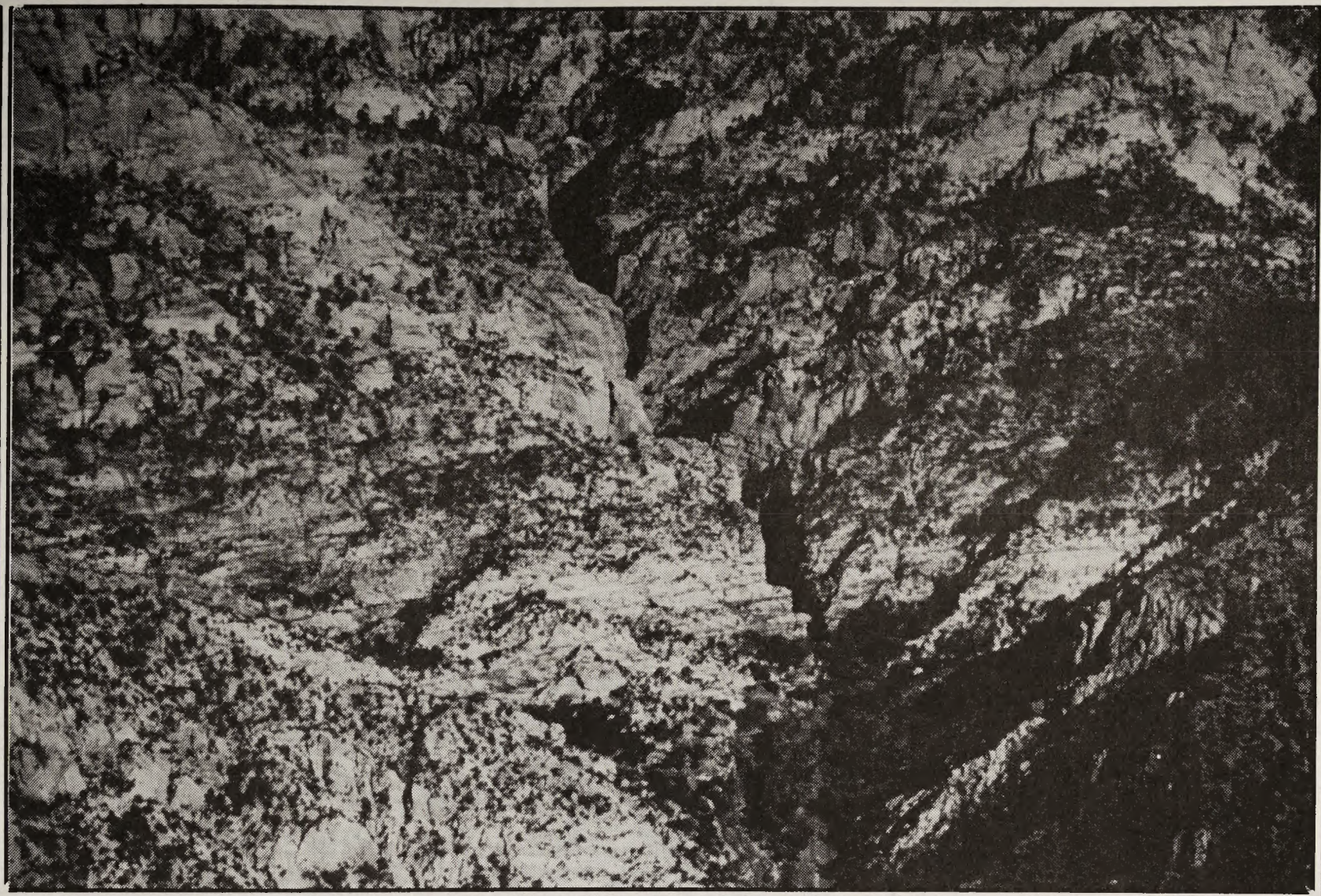
The Red Butte WSA is in Washington County. The Washington County Master Plan identifies the WSA as an open space zone, and the Washington County Commission has indicated that they do not support wilderness designation for this WSA. The County Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS, the County has stated that the WSA should be transferred from BLM to NPS jurisdiction through legislative enactment of a park expansion bill.

RED BUTTE WSA

Table 4
Comparative Summary of Impacts by Alternative

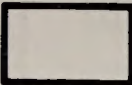



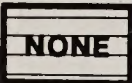
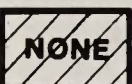
Alternatives	
	No Action/No Wilderness
Issue Topic	Recommendation All Wilderness (804 Acres)
Impacts on Wilderness Values	Wilderness designation would preserve the wilderness values of naturalness, solitude and primitive recreation, and special features including Class A scenery, endangered or sensitive species, and wildlife associated with wilderness, wherever these values occur in the WSA. Wilderness values would not be protected by wilderness designation. In the foreseeable future, no disturbance that would affect wilderness values is anticipated.

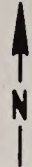
Spring Creek Canyon
WSA



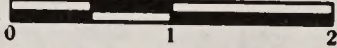
SPRING CREEK CANYON WSA

Spring Creek Canyon WSA Proposal UT-040-148

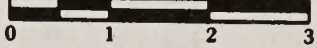
-  RECOMMENDED FOR WILDERNESS
-  RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



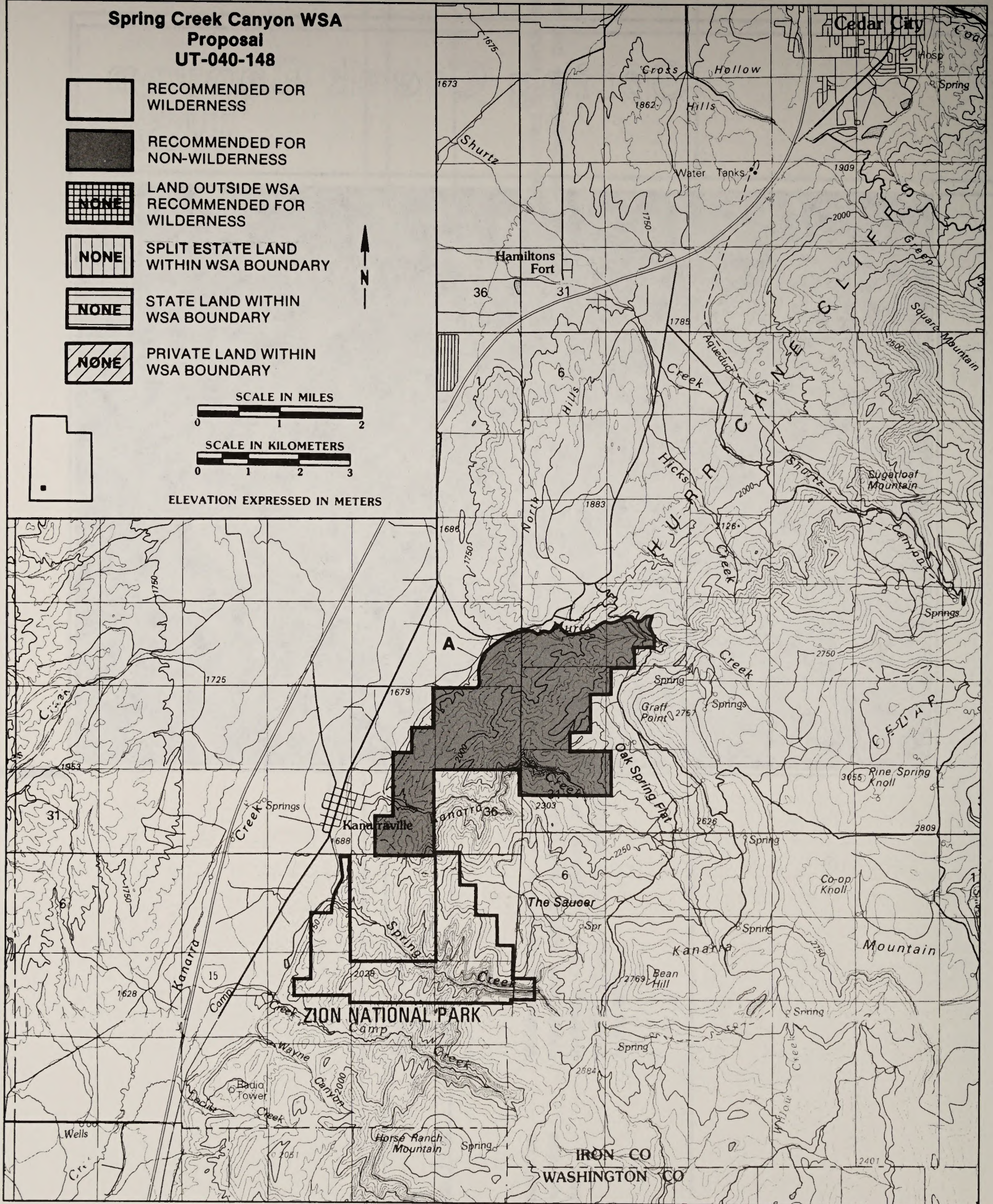
SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS



T. 36 S.

T. 37 S.

T. 38 S.

R. 12 W.

R. 11 W.

October 1991

SPRING CREEK CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 4,433 acres

The Spring Creek Canyon Wilderness Study Area (WSA) (UT-040-148) is in the southeastern corner of Iron County, about 7 miles southwest of Cedar City, Utah (population 10,972). The WSA extends about 6 miles from north to south and 3 miles from east to west. The study area is 1.5 to 2 miles east of Interstate Highway 15 (I-15) and immediately east of the community of Kanaraville. The configuration of the WSA is mostly dependent on land ownership. Private land and two State sections surround the study area, and the southern boundary adjoins Zion National Park (see Map). Two State sections nearly bisect the WSA. The WSA includes 4,433 acres of public lands administered by the Bureau of Land Management (BLM).

There are no private, State, or split-estate lands in the WSA (see Table 1).

The study area includes a portion of the Hurricane Cliffs, an impressive west-facing escarpment that extends from north of Cedar City into northwestern Arizona. Two major canyons, Kanarra and Spring Creek, bisect the WSA. Elevation ranges from 5,600 feet at the base of the cliffs to almost 7,900 feet on the plateau atop the Cliffs. Juniper, scrub oak, shrubs, and grasses predominate, but vegetative cover generally is not dense. Sedges, rushes, cottonwoods, willows, and shrubs characteristic of riparian zones in the region grow on the canyon floors.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	4,433
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	4,433
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	1,607
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	1,607
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	2,926
Split-Estate	0
Total BLM land not recommended for wilderness	2,926
In-holdings (State, Private)	0

Source: BLM File Data

SPRING CREEK CANYON WILDERNESS STUDY AREA

The WSA was dropped from wilderness study status by the Secretary of the Interior on December 30, 1982 due to its small size, but because of its wilderness values and proximity to Zion National Park, including a National Park Service (NPS) endorsed wilderness proposal of 120,620-acres, it was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. The southern portion of the WSA is adjacent to the 120,620 acre area administratively endorsed by the NPS for wilderness designation. Three alternatives were analyzed in the EIS: a partial wilderness alternative where 1,607 acres would be designated as wilderness and 2,826 acres would be released for uses other than wilderness, which is the recommendation in this report; a no wilderness (no action) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 1,607 acres
(recommended for wilderness)
- 2,826 acres
(recommended for nonwilderness)

The recommendation for this WSA is to designate 1,607 acres as wilderness and to release the remaining 2,826 acres for other uses. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The southern and recommended portion of the WSA is almost severed from the northern portion by State and private lands. The geographic configuration results in a WSA of two distinct parts. Each portion exhibits different characteristics and geographic relationships. The recommended southern portion adjoining Zion National Park is small but can be effectively managed as wilderness. All of the recommended portion is in a natural state and has outstanding opportunities for solitude and primitive recreation. Special features include the

scenery in Spring Creek Canyon which closely resembles the landscape of Camp Canyon immediately to the south in Zion National Park. Many of the remaining terrain and scenic features in the recommended portion are very similar to those in the neighboring portion of the Park. Wilderness protection of the southern part of the WSA would complement the values in Zion National Park.

Designation of the recommended area would conflict with a limited potential for oil and gas exploration and a potential for development of a municipal water line in Spring Creek Canyon. The wilderness values of the recommended area outweigh these conflicts because production of oil and gas is not likely following exploration, and recent upgrading of municipal water facilities in Kanarra Creek will provide adequate municipal water for Kanarraville.

The northern portion of the WSA also is in a natural condition. Approximately 62 percent of this area has outstanding opportunities for solitude and 54 percent has outstanding opportunities for primitive recreation. Designation of the northern portion of the WSA could not complement or influence Park values. The northern section is separated from both the recommended portion and Zion National Park by State and private lands. Wilderness management of this portion of the WSA would not be effective or cohesive because the two portions of the WSA are linked only at a section corner.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The WSA basically appears as untouched deep canyon systems cutting through rocky ledges and cliffs. The southern portion of the WSA has outstanding scenic values equal in quality to those of Zion National Park. All of the WSA is in a natural condition. Short ways in the mouths of Spring

SPRING CREEK CANYON WILDERNESS STUDY AREA

Creek and Kanarra Canyon total about a 0.5 mile. There is also a water pipeline on State lands in Kanarra Canyon that crosses about a 0.5 mile of the WSA. A fenced community dump site near the mouth of Spring Creek Canyon is outside the WSA boundaries.

B. Solitude

Approximately 3,728 acres (84 percent) of the WSA possess outstanding opportunities for solitude.

The WSA is in an extremely rugged area and terrain is the major factor contributing to the opportunity for solitude. Woodlands and dense riparian vegetation in Kanarra and Spring Creek Canyons enhance the screening provided by terrain.

Kanarra and Spring Creek Canyons occupy more than 66 percent of the WSA. The Spring Creek Canyon system is intricately dissected. The higher elevations and the upper portions of the canyon have a moderately dense spruce-fir cover. The northern part of the WSA, including Kanarra Canyon, is similar to the Spring Creek Canyon area, and also provides solitude.

The gradient in the WSA is almost 3,000 feet in 1 mile throughout the unit. At the base of the WSA, the flats and the face of the initial ridge do not provide an opportunity for solitude. In the upper portions, where Woods Hollow and Oak Spring Flat extend into the WSA, the opportunity for solitude is also lacking.

C. Primitive and Unconfined Recreation

Overall, outstanding opportunities for primitive and unconfined recreation are present on approximately 3,568 acres (81 percent) of the WSA.

The Spring Creek and Kanarra Canyon systems offer outstanding hiking, exploring, and backpacking opportunities. Almost 50 percent of the 2.5-mile Spring Creek Canyon system is within the unit, including the most entrenched portion of the canyon system.

The sandstone ridge and cliffs north of Kanarra Canyon also provide numerous

options for hiking and backpacking. Much of this rugged area lacks well-defined routes, but is conducive to exploration. Woods Hollow, the Saucer, and Oak Springs Flat in the WSA are excellent hiking areas. Hiking on some of the lower ridges is less interesting.

D. Special Features

Approximately 73 percent (3,233 acres) of the WSA is rated as outstanding for scenic quality. The WSA has scenic values similar to those found in contiguous Zion National Park.

The WSA may be habitat for or be visited by two endangered bird species (bald eagle and peregrine falcon) and 13 animal and four plant species that are considered sensitive. Although these species add to the wilderness values of the WSA, they are not confined to the Spring Creek Canyon study area.

Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems or an individual ecosystem not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in a transition zone between the Intermountain Sagebrush Province/Ecoregion and the Rocky Mountain Forest Province/Ecoregion. The PNV in both provinces in the WSA is juniper-pinyon woodland (2,217 acres and 2,216 acres, respectively, in the two provinces).

SPRING CREEK CANYON WILDERNESS STUDY AREA

The PNV in the Intermountain Sagebrush Province is represented in the NWPS only in Utah but would be in other BLM study areas both in and outside of Utah.

The PNV in the Rocky Mountain Forest Province (juniper-pinyon woodland) is represented in the NWPS outside of Utah only.

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of these population centers.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	6	93,656	75	2,151,690
NATIONWIDE (ROCKY MOUNTAIN FOREST PROVINCE)				
Juniper-Pinyon Woodland	2	41,451	19	165,420
UTAH (INTERMOUNTAIN SAGEBRUSH PROVINCE)				
Juniper-Pinyon Woodland	2	14,995	13	257,216
UTAH (ROCKY MOUNTAIN FOREST PROVINCE)				
Juniper-Pinyon Woodland	0	0	3	44,852

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,099,962	78	2,249,195
Provo-Orem, Utah	11	721,793	80	2,776,308
Las Vegas, Nevada	38	3,132,130	54	2,175,694

Source: BLM File Data.

SPRING CREEK CANYON WILDERNESS STUDY AREA

C. Balancing the Geographic Distribution of Wilderness Areas

The Spring Creek Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall, the WSA could be effectively managed to preserve its wilderness character. The WSA receives relatively little use. One grazing permittee is authorized to utilize 33 animal unit months (AUMs) of forage a year, but the area has not been grazed in recent years. Recreational visitors spend about 700 visitor days annually in the WSA. There are no private or State in-holdings to interfere with wilderness management. There are no mineral leases, mining claims or other valid rights that would significantly affect management of wilderness values in the recommended portion of the WSA.

The area not recommended as wilderness also could be managed as wilderness. There are 21 mining claims covering 420 acres in this portion of the WSA, but mineral values are relatively low and development is not expected in the fore-

seeable future. The area not recommended is separated from the recommended portion by a State section and is not adjacent to Zion National Park. Therefore, coordinated management of wilderness values in this area in conjunction with the 120,620-acre area of the park administratively endorsed as wilderness by the NPS, would not be practical.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Spring Creek Canyon WSA (USGS Bulletin 1746-F, R.E. Van Loenen, et al., 1989). The report indicates that inferred sub-economic resources of common variety sand, sandstone, and limestone occur in the study area. The study area has a moderate potential for undiscovered resources of oil and gas and low potential for all metallic resources (including copper, silver, and uranium), and geothermal resources. No potential exists for coal and gypsum resources.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 29 inputs specifically addressing this WSA were received from 33 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same

SPRING CREEK CANYON WILDERNESS STUDY AREA

commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 22 commenters supported wilderness designation for part or all of the WSA, while seven were opposed. Four commenters addressed the relative merits of the EIS, but took no formal position on wilderness designation.

Those favoring wilderness commented that wilderness designation would complement proposed wilderness in adjacent Zion National Park. Those commenting in favor of wilderness were almost evenly from rural and urban Utah and other states.

Those opposing wilderness were concerned that the WSA is too small to be a designated wilderness. All of those opposed to wilderness designation were from rural Utah.

One Federal agency, the NPS commented on the Draft EIS for the Spring Creek WSA. The NPS supported wilderness designation for the WSA, provided information on potential for endangered species in the area, and questioned changes in livestock forage allocations in the WSA between 1982 and publication of the Draft EIS.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the Spring Creek Canyon WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the Spring Creek Canyon WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in the gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study

should be given to the potential of transferring most of these WSAs from BLM to NPS management. The BLM and NPS agree that transferral of administration is a separate issue, independent of the wilderness review.

The State of Utah also noted that the mineral potential of the WSA is probably low.

The Spring Creek Canyon WSA is in Iron County. The Iron County Land Management Code identifies the WSA as an open space zone, and the Iron County Commission has indicated that they do not support wilderness designation for this WSA. The County Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS, the County Commission stated that the Spring Creek Canyon WSA should not be designated as wilderness until legal decisions concerning water rights are reached. They reported the potential for conflicts with water development, and express their opinion that the recreational values of the area are less than outstanding because the WSA is separated into two pieces by a State section.

SPRING CREEK CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives			
Issue Topic	Proposed Action Partial Wilderness (1,607 Acres)	No Action/No Wilderness	All Wilderness (4,433 Acres)
Impacts on Wilderness Values	Wilderness values would be preserved in the designated portion which is approximately 36 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 2 acres and indirectly reduced in quality on up to an additional 18 adjacent acres in the nondesignated portion due to disturbance from mineral exploration. Class A scenery would be reduced in quality on disturbed and adjacent acres in the nondesignated area. Vehicular use of less than 0.5 mile of way in the nondesignated portion would occasionally detract from opportunities for solitude and primitive recreation.	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 21 acres and indirectly reduced in quality on up to an additional 180 acres due to disturbance from mineral exploration and water development. Special features would not be significantly affected except for loss of scenic quality in disturbed and adjacent areas. Vehicular use of 0.5 mile of ways in two areas would occasionally detract from opportunities for solitude and primitive recreation.	Wilderness designation would preserve the wilderness values of naturalness, outstanding opportunities for solitude and primitive recreation, and special features, including Class A scenery, endangered or sensitive species, and wildlife associated with wilderness, wherever these values are found in the WSA.
Impacts on Water Resources	Wilderness designation would not affect current uses of Kanarra Creek, but development of a pipeline to deliver water from Spring Creek Canyon to Kanarraville would not occur.	Existing and future uses of the water resources in the WSA by the town of Kanarraville would not be affected because construction of a pipeline would be allowable.	Wilderness designation would not affect current uses of Kanarra Creek, but development of a pipeline to deliver water from Spring Creek Canyon to Kanarraville would not occur.
Impacts on Mineral and Energy Exploration and Production	Opportunities for mineral exploration would be eliminated in the designated area, but not in the nondesignated area. Due to the small size of potential mineral deposits in the WSA, and because development is unlikely even without wilderness designation, it is concluded that this alternative would not significantly affect mineral resource development.	Mineral exploration would not be affected because future leasing and location of mining claims and development could occur without constraints for preservation of wilderness values.	Wilderness designation would eliminate potential exploration opportunities for mineral resources in the WSA. Due to the small size of potential mineral deposits in the WSA and because development is unlikely even without wilderness designation, it is concluded that this alternative would not significantly affect mineral resource development.

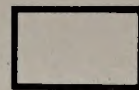


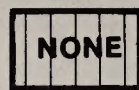
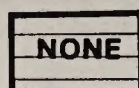
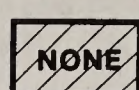
THE WATCHMAN WSA

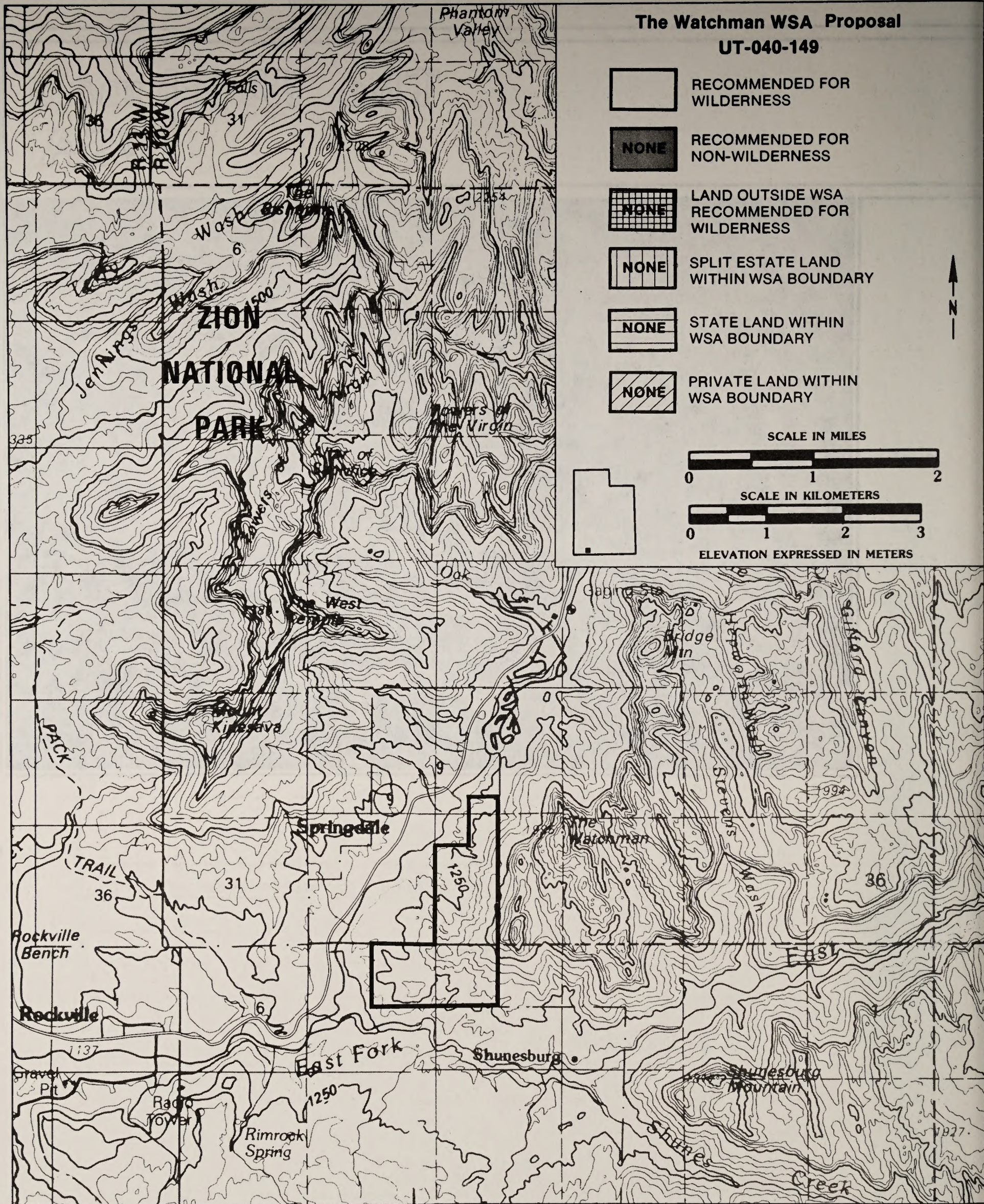
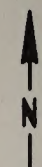
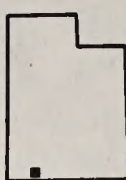
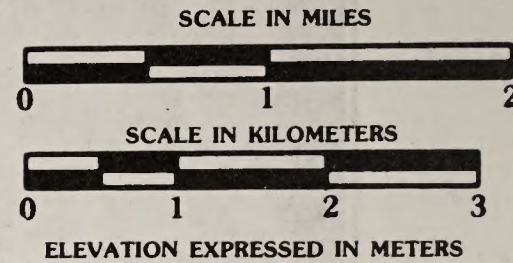
The Watchman WSA



THE WATCHMAN WSA

The Watchman WSA Proposal UT-040-149

-  RECOMMENDED FOR WILDERNESS
-  NONE RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



T. 41 S.

THE WATCHMAN WILDERNESS STUDY AREA

1. THE STUDY AREA: 600 acres

The Watchman Wilderness Study Area (WSA) (UT-040-149) is in southeastern Washington County. It is adjacent to Springdale, Utah (population 258) and is 2 miles south of the southern entrance to Zion National Park. The WSA extends 1.5 miles from north to south and 1 mile from east to west (see Map). The east boundary of the unit is contiguous with Zion National Park for 1.5 miles and adjoins private land on the north, south, and southwest. The WSA includes 600 acres of public lands administered by the Bureau of Land Management (BLM). There are no private, State, or split-estate lands in the WSA (see Table 1).

The WSA includes part of the western slopes of Johnson Mountain and The Watchman which are high sandstone towers in Zion National Park.

The slopes in the WSA drain to both the East Fork and the North Fork of the Virgin River. Elevations range from 3,800 feet to 5,200 feet. The Watchman study area is in a zone transitional between hot desert and cold desert vegetation. Shrubs dominate, with intermixed grasses and forbs and scattered pinyon-juniper, but there is much exposed rock.

The WSA was dropped from wilderness study status by the Secretary of the Interior on December 30, 1982 due to its small size, but because of its wilderness values and proximity to Zion National Park, including a National Park Service (NPS) endorsed wilderness proposal of 120,620 acres, it was studied under Section 202 of the Federal Land Policy and Management ACT (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	600
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	600
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	600
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	600
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

THE WATCHMAN WILDERNESS STUDY AREA

Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this report, and a no wilderness (no action) alternative.

2. RECOMMENDATION AND RATIONALE:

600 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate the entire area as wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. Little or no conflict with other uses exists.

The WSA is small but can be effectively managed as wilderness. Although it is small, it is an extension of the high wilderness values found on adjacent NPS administered land in Zion National Park. Wilderness protection of the WSA would add to Zion National Park values. Wilderness designation of the WSA would preserve the natural environment near the entrance to the Park and accommodate a trail for hiking along the Virgin River East Fork (Parunuweap Canyon). No conflicts exist with other uses.

All of the WSA is natural. About 75 percent of the area has outstanding opportunities for solitude and primitive recreation.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The WSA is in a natural condition. A microwave transmitter was installed at the base of Johnston Mountain in the WSA in 1975, but little surface disturbance occurred because this transmitter was installed and is maintained by helicopter.

The WSA is basically the untouched slopes at the foot of towers in Zion National Park. The slopes are exposed rock talus with a sparse cover of desert shrubs, pinyon and juniper trees. The landscape of the WSA is a foreground for Zion National Park and does not include the spectacular sandstone tower scenery immediately adjacent in the National Park.

B. Solitude

Opportunities for solitude are outstanding on about 450 acres in the WSA, mostly because of screening provided by the terrain. The unit includes rugged foothills below Johnston Mountain and The Watchman. Plant cover provides little screening, however, as the area is only sparsely vegetated.

C. Primitive and Unconfined Recreation

The Watchman WSA offers outstanding opportunities on 450 acres for hiking, exploring, rock climbing, and geologic study. These activities are enhanced by the adjacent Zion National Park.

D. Special Features

All of the WSA is rated as outstanding for scenic quality.

The endangered bald eagle and peregrine falcon, as well as 13 additional animal species and four plant species that are considered to be sensitive, occur or may occur in the WSA. Desert bighorn sheep and cougar also occasionally use the WSA. Although these species add to the wilderness values of the WSA, they are not confined to the Watchman study area. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a potential natural vegetation

THE WATCHMAN WILDERNESS STUDY AREA

(PNV) ecosystem not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is entirely juniper-pinyon woodland (600 acres). The PNV in the WSA is represented in the NWPS nationally and in Utah and in other BLM study areas in Utah and other states.

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Salt Lake City-Ogden, Utah; Provo-Orem, Utah; and Las Vegas, Nevada. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of these population centers.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,143,405
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,705,598

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Salt Lake City-Ogden, Utah	11	1,099,962	78	2,258,871
Provo-Orem, Utah	11	721,793	90	2,786,064
Las Vegas, Nevada	38	3,132,130	54	2,175,694

Source: BLM File Data.

C. Balancing the Geographic Distribution of Wilderness Areas

The Watchman WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS include 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada. Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north,

THE WATCHMAN WILDERNESS STUDY AREA

are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall the WSA could be effectively managed to preserve its wilderness character. The WSA receives relatively little visitor use. In the event of any future heavy visitor use demand, administration of visitor access would be difficult. Access between Zion National Park and the WSA is physically restricted by the rugged terrain and high cliffs of Johnston Mountain and The Watchman. Visitor access along the remaining boundary is restricted by the presence of private lands on this perimeter.

One grazing permittee utilizes 24 animal unit months (AUMs) of forage a year in the WSA. Recreational visitors spend less than 100 visitor days annually in the WSA. There are no private or State in-holdings to interfere with wilderness management, and there are no mineral leases, mining claims or other valid rights in the WSA.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for The Watchman WSA (USGS Bulletin 1746-A, R.E. Van Loenen, et al., 1989). The report indicates that the WSA has a moderate energy mineral resource potential and low resource potential for undiscovered copper, gold, lead, silver, zinc, manganese, uranium, coal, and geothermal energy resources.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values which is considered to be the only pertinent resource that would be significantly affected by designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 29 inputs specifically addressing this WSA were received from 28 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 22 commenters supported wilderness designation for part or all of the WSA, while two commenters were opposed. Four commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented that wilderness designation would complement proposed wilderness in adjacent Zion National Park. The majority of those commenting in favor of wilderness were almost evenly from rural and urban Utah and other states.

Those opposing wilderness were concerned that the WSA is too small to be a designated wilderness and lacks solitude and outstanding opportunities for primitive

THE WATCHMAN WILDERNESS STUDY AREA

recreation. Both comments were from rural Utah.

One Federal agency, the NPS, commented on the Draft EIS for the Watchman WSA. The NPS supported wilderness designation for the WSA, provided information on the potential for endangered species in the area.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the Watchman WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, The Watchman, Taylor Creek Canyon, Goose Creek Canyon, and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study should be given to the potential of transferring most of these WSAs from BLM to NPS management. The BLM and NPS agree that transferral of administration is a separate issue, independent of the wilderness review.

The State also noted that the mineral potential of the area is probably low, and inquired as to the visual impact of the pre-1976 transmitter in the WSA.

The Watchman WSA is in Washington County. The Washington County Master Plan identifies the WSA as an open space zone, and the Washington County Commission has indicated that they do not support wilderness designation for this WSA. The County Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS, the County stated that in their opinion this WSA does not provide outstanding

opportunities for solitude or primitive recreation; and that the WSA should be transferred from BLM to NPS jurisdiction through legislative enactment of a park expansion bill.

THE WATCHMAN WSA

Table 4
Comparative Summary of Impacts by Alternative

Issue Topic	Recommendation All Wilderness (600 Acres)	No Action/No Wilderness
Impacts on Wilderness Values	Wilderness designation would preserve the wilderness values of naturalness, outstanding opportunities for solitude and primitive recreation, and special features including Class A scenery, endangered or sensitive species, and wildlife associated with wilderness, wherever these values occur in the WSA.	No disturbance that would affect wilderness values would be expected in the foreseeable future.

TAYLOR CREEK CANYON WSA

Taylor Creek Canyon WSA



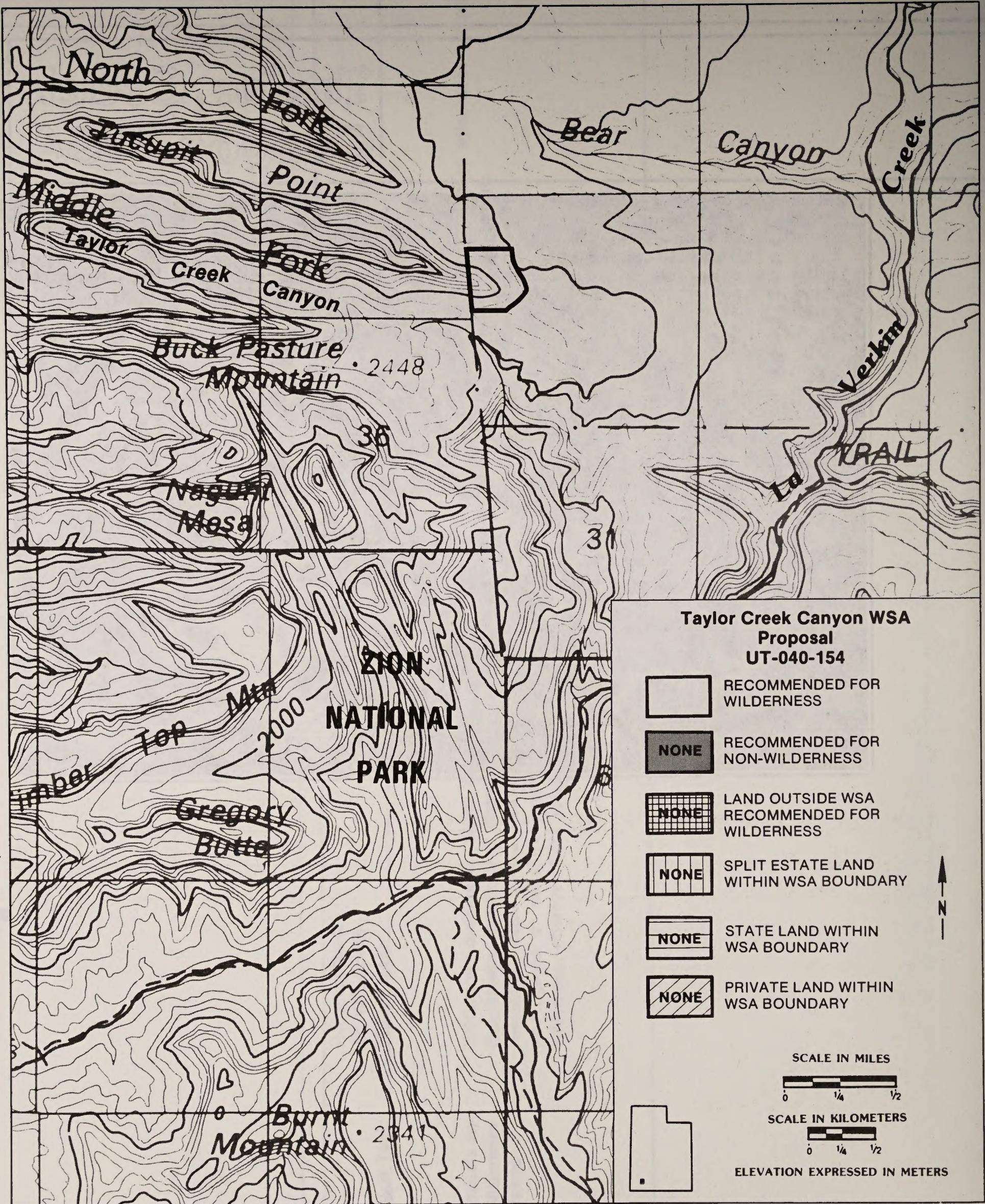
TAYLOR CREEK CANYON WSA

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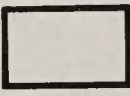
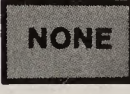

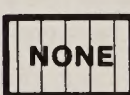
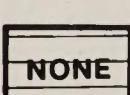
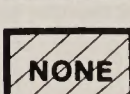
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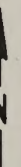
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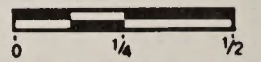


Taylor Creek Canyon WSA Proposal UT-040-154

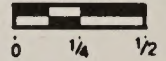
-  RECOMMENDED FOR WILDERNESS
-  NONE RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY



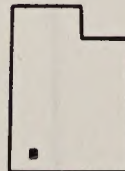
SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS



TAYLOR CREEK CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 35 acres

The Taylor Creek Canyon Wilderness Study Area (WSA) (UT-040-154) is in the north-eastern corner of Washington County, about 15 miles south of Cedar City, Utah (population 10,972). The study area is a small unit, measuring a 0.25 mile from north to south and a 0.25 mile from east to west (see Map). This is the smallest of the BLM WSAs in Utah. The WSA adjoins Zion National Park on the west, and is entirely surrounded by private and State land on the north, east, and south. The WSA includes 35 acres of public lands administered by the Bureau of Land Management (BLM).

There are no private, State, or split-estate lands in the WSA (see Table 1).

The WSA is on the Kolob Plateau in the Grand Staircase, the terraced southern margin of the High Plateaus of Utah section of the Colorado Plateau Physiographic Province. The 600-foot deep upper portion of Taylor Creek Canyon occupies almost all of the WSA. The upper rim of the canyon, at about 7,800 feet elevation, provides an excellent view of the canyon and a panoramic view of Zion National Park to the south. More than 60 percent of the WSA is bare rock surface. The remainder supports coniferous forest and shrub woodland.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	35
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	35
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	35
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	35
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

The WSA was dropped from wilderness study status by the Secretary of the Interior on December 30, 1982 due to its small size, but because of its wilder-

ness values and proximity to Zion National Park, including a National Park Service (NPS) endorsed wilderness proposal of 120,620 acres, it was studied

TAYLOR CREEK CANYON WILDERNESS STUDY AREA

under Section 202 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this report, and a no wilderness (no action) alternative.

2. RECOMMENDATION AND RATIONALE:

35 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate all of the area as wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. Little or no conflict with other uses exists.

The WSA is small but can be effectively managed as wilderness. Although it is small, it is an extension of the high wilderness values found on adjacent NPS administered land in Zion National Park.

All of the WSA is natural and has outstanding opportunities for solitude and primitive recreation.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The WSA is in a natural condition. There are no known intrusions.

The WSA constitutes the extreme upper headwall and rim area of the Middle Fork of Taylor Creek Canyon. Although it lacks the sheer red-colored walls of the main canyon in the National Park, the WSA is part of the Middle Fork Canyon landscape and displays scenic values

similar in quality to the values in the Park.

B. Solitude

The narrow sheer-walled canyon of the Middle Fork of Taylor Creek offers outstanding opportunities for solitude in Zion National Park and in the WSA.

C. Primitive and Unconfined Recreation

The canyon of the Middle Fork of Taylor Creek offers primitive and unconfined recreation opportunities such as hiking, backpacking, and photography. Within the WSA headwall portion of the upper canyon, the outstanding opportunities may be limited to rock climbing and photography.

D. Special Features

Special features identified during the wilderness inventory include excellent raptor habitat and exceptional scenic values similar to those of Zion National Park. The entire WSA is rated as outstanding for scenic values.

The endangered bald eagle and peregrine falcon, as well as 13 additional animal species and four plant species that are considered to be sensitive, occur or may occur in the WSA. Cougar also use the WSA. Although these species add to the wilderness values of the WSA, they are not confined to the Taylor Creek Canyon study area. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS. It would, however, add a PNV ecosystem (Colorado Plateau Arizona pine forest) not now represented in the NWPS in Utah,

TAYLOR CREEK CANYON WILDERNESS STUDY AREA

but the acreage would be almost insignificant.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the transition zone between the Colorado Plateau Province/Ecoregion and Rocky Mountain Forest Province/Ecoregion. The PNV in the WSA is Arizona pine forest for both ecoregions (17 and 18 acres, respectively).

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of this population center.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	3	26,300	8	20,033
NATIONWIDE (ROCKY MOUNTAIN FOREST PROVINCE)				
Arizona Pine Forest	2	24,902	3	1,215
UTAH (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	0	0	8	20,033
UTAH (ROCKY MOUNTAIN FOREST PROVINCE)				
Arizona Pine Forest	2	24,902	3	1,215

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	54	2,172,463

Source: BLM File Data.

TAYLOR CREEK CANYON WILDERNESS STUDY AREA

C. Balancing the Geographic Distribution of Wilderness Areas

The Taylor Creek Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall the WSA could be effectively managed to preserve its wilderness character. Administration of visitor access is difficult because the WSA is totally surrounded by State, private, and NPS lands. Access to and from the WSA is physically isolated from Zion National Park by the high cliffs. Other access is restricted by private land ownerships. The WSA receives little use at present and no increase in future on-site use is anticipated.

The WSA is unsuitable for grazing and recreational visitors spend only about 50 visitor days annually in the WSA. There are no private or State in-holdings to interfere with wilderness management, and there are no mineral leases, mining claims or other valid rights in the WSA.

Energy and Mineral Resource Values

The U. S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Taylor Creek Canyon WSA (USGS Bulletin 1746-E, R.E. Van Loenen, et al., 1989). The report indicates that the WSA has a moderate energy resource potential for oil and gas. Mineral resource potential is low for undiscovered resources of all metals, including silver and uranium. The WSA also has low energy resource potential for geothermal resources. There is no potential for coal and gypsum.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values which is considered to be the only pertinent resource that would be significantly affected by designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 30 inputs specifically addressing this WSA were received from 34 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 29 commenters supported wilderness designation for part or all of the WSA, while two commenters were opposed. Three commenters addressed the

TAYLOR CREEK CANYON WILDERNESS STUDY AREA

relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented that wilderness designation would complement proposed wilderness in adjacent Zion National Park. Those commenting in favor of wilderness were almost evenly from rural and urban Utah and other states.

Those opposing wilderness were concerned that the WSA is too small to be a designated wilderness and lacks solitude and outstanding opportunities for primitive recreation. Both comments were from rural Utah.

One Federal agency, the NPS, commented on the Draft EIS for the Taylor Creek Canyon WSA. The NPS supported wilderness designation for the WSA, provided information on the potential for endangered species in the area, and questioned changes in livestock forage allocations in the WSA between 1982 and publication of the Draft EIS.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the Taylor Creek Canyon WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, The Watchman, Taylor Creek Canyon, Goose Creek Canyon, and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study should be given to the potential of transferring most of these WSAs from BLM to NPS management. The BLM and NPS agree that transferral of administration is a separate issue, independent of the wilderness review.

The Taylor Creek Canyon WSA is in Washington County. The Washington County Master Plan identifies the WSA as an open space zone, and the Washington County Commission has indicated that they do not support wilderness designation for this WSA. The County Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS, the County stated that the WSA should be transferred from BLM to NPS jurisdiction through legislative enactment of a park expansion bill.

TAYLOR CREEK CANYON WSA

Table 4
Summary of Environmental Consequences

Alternatives	
Resource	No Action/No Wilderness
<p>Recommendation All Wilderness (35 Acres)</p>	
<p>Impacts on Wilderness Values</p>	<p>Wilderness values would of be protected by wilderness designation. No disturbance is projected in the foreseeable future that would affect wilderness values.</p>

GOOSE CREEK CANYON WSA

Goose Creek Canyon WSA

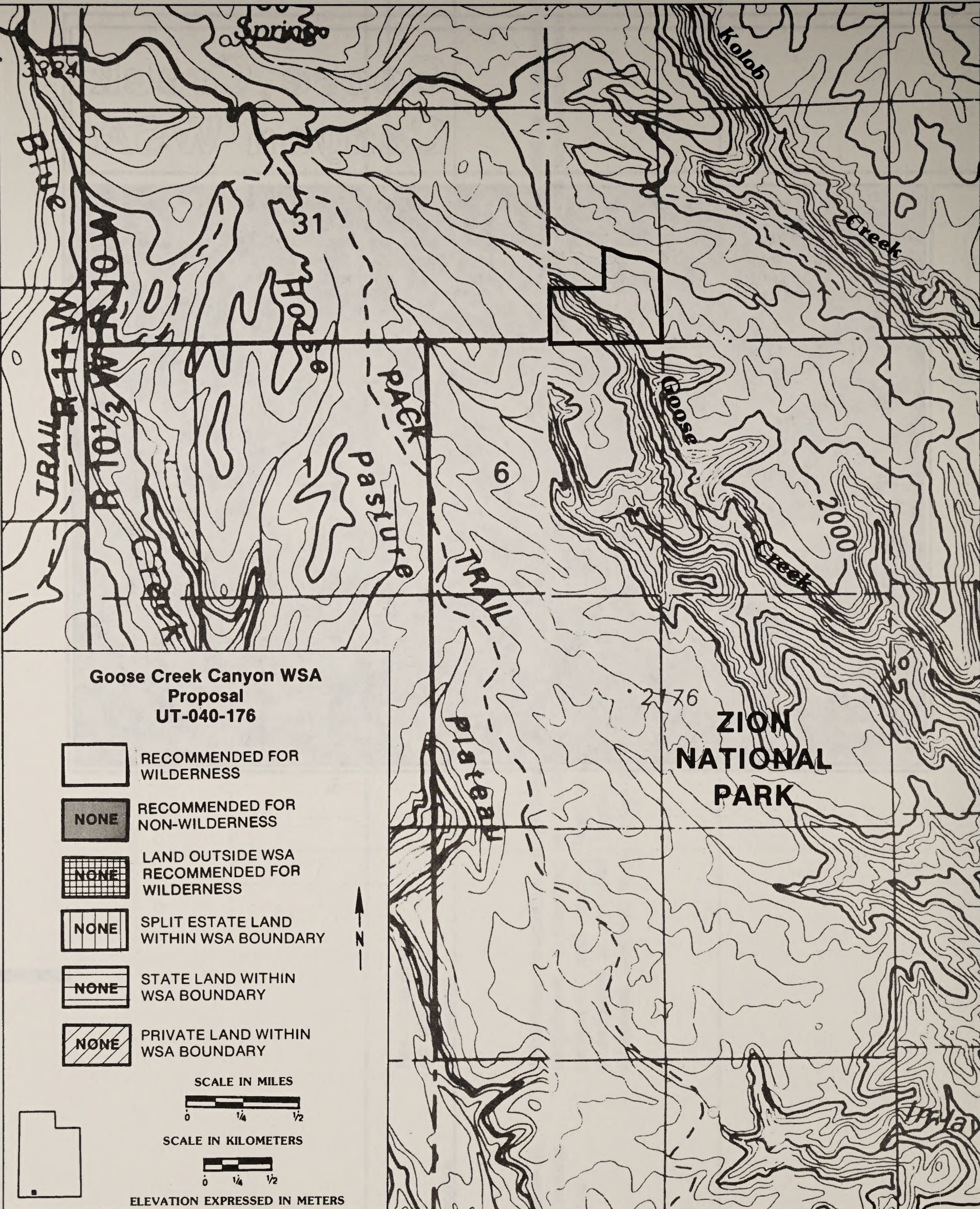


GOOSE CREEK CANYON WSA
1970-1971
WATER RESOURCES DIVISION
BUREAU OF RECLAMATION
DEPARTMENT OF THE INTERIOR
WASHINGTON, D.C.

GOOSE CREEK CANYON WSA


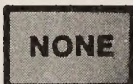
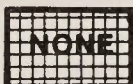
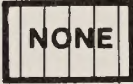
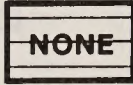
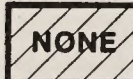
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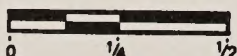


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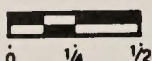
Goose Creek Canyon WSA Proposal UT-040-176

-  RECOMMENDED FOR WILDERNESS
-  NONE RECOMMENDED FOR NON-WILDERNESS
-  NONE LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS
-  NONE SPLIT ESTATE LAND WITHIN WSA BOUNDARY
-  NONE STATE LAND WITHIN WSA BOUNDARY
-  NONE PRIVATE LAND WITHIN WSA BOUNDARY

SCALE IN MILES



SCALE IN KILOMETERS



ELEVATION EXPRESSED IN METERS

GOOSE CREEK CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 89 acres

The Goose Creek Canyon Wilderness Study Area (WSA) (UT-040-176) is in northeastern Washington County, about 20 miles northwest of Orderville, Utah (population 423). The study area is rectangular, extending 0.25 mile from north to south and 0.50 mile from east to west.

The WSA adjoins Zion National Park on the south and is entirely surrounded by private land on all the other sides (see Map). The WSA includes 89 acres of public land administered by the Bureau of Land Management (BLM).

There are no private, State, or split-estate lands in the WSA (see Table 1).

The WSA is on the Kolob Plateau in the Grand Staircase, the terraced southern margin of the High Plateaus of Utah section of the Colorado Plateau Physiographic Province. The terrain is dominated by 1,000-foot deep canyons of the Goose Creek drainage, which lead into Zion National Park. The elevation of the canyon rims is about 7,000 feet. Ponderosa pine, aspen, Douglas fir, white fir, and juniper grow in the WSA, although about 20 percent of the surface is bare rock.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	89
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	89
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	89
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	89
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

The WSA was dropped from wilderness study status by the Secretary of the Interior on December 30, 1982 due to its

small size, but because of its wilderness values and proximity to Zion National Park, including a National Park

GOOSE CREEK WILDERNESS STUDY AREA

Service (NPS) endorsed wilderness proposal of 120,620-acres, it was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this report, and a no wilderness (no action) alternative.

2. RECOMMENDATION AND RATIONALE:

89 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate all of the area as wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change in the natural environment over the long term. Little or no conflict with other uses exists.

The WSA is small but can be effectively managed as wilderness. All of the WSA is in a natural condition. Although it is small, it is an extension of the high wilderness values found on adjacent NPS administered land in Zion National Park. The WSA has exceptional scenic values and cannot be visually distinguished from the adjacent National Park.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The WSA is in a natural condition. The WSA basically appears as an untouched deep canyon system with outstanding scenic values equal in quality to those of Zion National Park. No surface-disturbing activities have occurred since the wilderness inventory.

B. Solitude

The narrow, sheer-walled canyons of Goose Creek offer outstanding opportunities for solitude when considered in conjunction with the contiguous Zion National Park.

C. Primitive and Unconfined Recreation

The canyon of Goose Creek offers primitive and unconfined recreation opportunities such as hiking, backpacking, technical rock climbing, and photography. The opportunities are outstanding when considered in conjunction with opportunities provided by the contiguous portion of the canyon in Zion National Park.

D. Special Features

All of the WSA has exceptional scenic values. The endangered bald eagle and peregrine falcon, as well as 13 additional animal species and four plant species that are considered to be sensitive, occur or may occur in the WSA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information. Cougar also use the WSA. Although these species add to the wilderness values of the WSA, they are not confined to the Goose Creek Canyon study area.

All of the WSA is rated as outstanding for scenic quality.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS, although it would add a PNV ecosystem (Colorado Plateau province Arizona pine forest) not now represented in a wilderness area in Utah.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and

GOOSE CREEK WILDERNESS STUDY AREA

is not necessarily the vegetation that is currently present in an area.

The WSA is in a transition zone between the Colorado Plateau Province/Ecoregion and the Rocky Mountain Forest Province/Ecoregion. The PNV in both ecoregions in the WSA is Arizona pine forest (44 and 45 acres, respectively).

This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of this population center.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	3	26,300	8	20,033
NATIONWIDE (ROCKY MOUNTAIN FOREST PROVINCE)				
Arizona Pine Forest	2	24,902	3	1,215
UTAH (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	0	0	8	20,033
UTAH (ROCKY MOUNTAIN FOREST PROVINCE)				
Arizona Pine Forest	2	24,902	3	1,215

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	54	2,172,463

Source: BLM File Data.

C. Balancing the Geographic Distribution of Wilderness Areas

The Goose Creek Canyon WSA would not contribute significantly to balancing

the geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS included 65 wilderness areas comprising 2,898,792

GOOSE CREEK WILDERNESS STUDY AREA

acres in Utah, Arizona, and Nevada.

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall, the WSA could be effectively managed to preserve its wilderness character. Administration of visitor access to Goose Creek Canyon would be difficult at the point where the canyon crosses the boundary between private and BLM lands. Visitor use within the canyon can be monitored and controlled through cooperative effort by BLM and NPS.

The WSA receives relatively little use. There is no livestock use in the WSA. Recreational visitors spend about 100 visitor days annually in the WSA. Access between the WSA and Zion National Park requires technical rock climbing. Therefore, most use comes from people using the dirt road that forms the northern boundary of the WSA. There are no private or State in-holdings to interfere with wilderness management, and there are no mineral leases, mining claims, or other valid rights in the WSA.

Energy and Mineral Resource Values

The U. S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Goose Creek Canyon WSA (USGS Bulletin 1746-E, R.E. Van Loenen, et al., 1989). The report indicates that the WSA has a moderate energy resource potential for

oil and gas. Mineral resource potential is low for undiscovered resources of all metals, including silver and uranium. The WSA is in an area identified as having low terrestrial heat flow and therefore the energy resource potential for geothermal resources is low. There is no potential for coal and gypsum.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values which is considered to be the only pertinent resource that would be significantly affected by designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 31 inputs specifically addressing this WSA were received from 35 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 30 commenters supported wilderness designation for part or all of the WSA, while two commenters were opposed. Three commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented that wilderness designation would complement proposed wilderness in adjacent

GOOSE CREEK WILDERNESS STUDY AREA

Zion National Park. The majority of those commenting in favor of wilderness were almost evenly from rural and urban Utah and other states.

Those opposing wilderness were concerned that the WSA is too small to be a designated wilderness and lacks solitude and outstanding opportunities for primitive recreation. Both comments were from rural Utah.

One Federal agency, the NPS, commented on the Draft EIS for the Goose Creek Canyon WSA. The NPS supported wilderness designation for the WSA and provided information on the potential for endangered species in the area.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the Goose Creek Canyon WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, The Watchman, Taylor Creek Canyon, Goose Creek Canyon, and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study should be given to the potential of transferring most of these WSAs from BLM to NPS management. The BLM and NPS agree that transferral of administration is a separate issue, independent of the wilderness review.

The Goose Creek Canyon WSA is in Washington County. The Washington County Master Plan identifies the WSA as an open space zone, and the Washington County Commission has indicated that they do not support wilderness designation for this WSA. The County Commission has endorsed the Consolidated Local Government Response to Wilderness that

opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS, the county stated that the WSA should be transferred from BLM to NPS jurisdiction through legislative enactment of a park expansion bill. Because of the small size of the WSA, the county does not believe that it provides outstanding opportunities for either solitude or primitive and unconfined recreation.

GOOSE CREEK CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

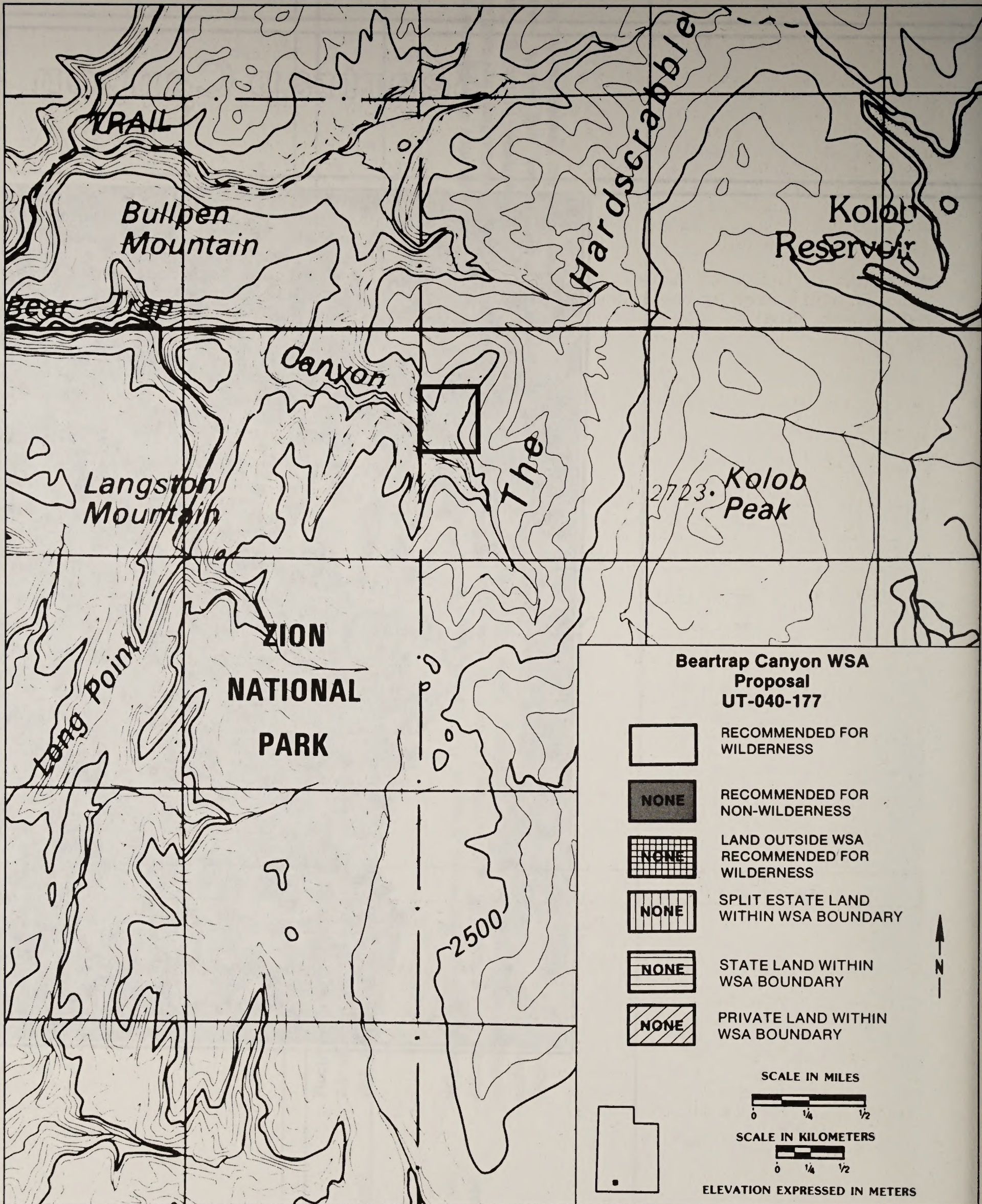
	Alternatives	
	All Wilderness (89 Acres)	No Action/No Wilderness
Impacts on Wilderness Values	Wilderness designation would preserve the wilderness values of naturalness, outstanding opportunities for solitude and primitive recreation, and special features including Class A scenery, endangered or sensitive species, and wildlife associated with wilderness, wherever these values occur in the WSA.	Because no disturbance is anticipated, no loss of wilderness values, including naturalness, outstanding opportunities for solitude and primitive recreation, and special features including Class A scenery, endangered or sensitive species, and wildlife associated with wilderness, would be expected in the foreseeable future.

Beartrap Canyon WSA



BEARTRAP CANYON WSA

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BEARTRAP CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 40 acres

The Beartrap Canyon Wilderness Study Area (WSA) (UT-040-177) is in north-eastern Washington County, about 16 miles south of Cedar City, Utah (population 10,972). The study area is rectangular, 0.5 mile wide from north to south and 0.13 mile from east to west (see Map). The unit is enclosed in a section of private land, and adjoins Zion National Park to the west.

The WSA includes 40 acres of public lands administered by the Bureau of Land Management (BLM).

There are no private, State, or split-estate lands in the WSA (see Table 1).

The WSA is on the Kolob Plateau in the Grand Staircase, the terraced southern margin of the High Plateaus of Utah section of the Colorado Plateau Physiographic Province. The terrain is very rugged: two small canyons tributary to Beartrap Creek, which flows into Zion National Park, join at the center of the WSA. The canyons are about 1,000 feet deep. Elevations at the canyon rims are around 7,600 feet. Some coniferous trees grow in the WSA, but more than 60 percent of the surface is bare rock.

**TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA**

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	40
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	40
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	40
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	40
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	0
Split-Estate	0
Total BLM land not recommended for wilderness	0
In-holdings (State, Private)	0

Source: BLM File Data

The WSA was dropped from wilderness study status by the Secretary of the Interior on December 30, 1982 due to its small size, but because of its wilder-

ness values and proximity to Zion National Park, including a National Park Service (NPS) endorsed wilderness proposal of 120,620 acres, it was studied

BEARTRAP CANYON WILDERNESS STUDY AREA

under Section 202 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Statement (EIS) finalized in November 1990. Two alternatives were analyzed in the EIS: an all wilderness alternative, which is the recommendation in this report, and a no wilderness (no action) alternative.

2. RECOMMENDATION AND RATIONALE:

40 acres

(recommended for wilderness)

0 acres

(recommended for nonwilderness)

The recommendation for this WSA is to designate all of the area as wilderness. Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change in the natural environment over the long term. Little or no conflict with other uses exists.

The WSA is small but can be effectively managed as wilderness. All of the WSA is in a natural condition. It contains rock features and hanging gardens. Although it is small, it is an extension of the high wilderness values found on adjacent NPS administered land in Zion National Park. The WSA has exceptional scenic values and cannot be visually distinguished from the adjacent National Park.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. The WSA is in a natural condition. It basically appears as an untouched deep canyon system with outstanding scenic values equal in quality to those of Zion National Park. No surface-disturbing activities have occurred since the wilderness inventory.

B. Solitude

Beartrap Canyon is a narrow, sheer-walled canyon that offers outstanding opportunities for solitude in Zion National Park. The contiguous WSA portion of the canyon is at the upper head-wall of Beartrap Canyon and displays opportunities for solitude comparable to the opportunities on NPS lands.

C. Primitive and Unconfined Recreation

The WSA is has outstanding opportunities for primitive and unconfined recreation when considered in conjunction with Zion National Park. In the National Park, Beartrap Canyon provides opportunities for hiking, backpacking, and photography. In the WSA portion of the canyon, recreation opportunities may be limited to rockclimbing activities on the head-wall.

D. Special Features

All of the WSA has exceptional scenic values. The endangered bald eagle and peregrine falcon, as well as 13 additional animal species and four plant species that are considered to be sensitive, occur or may occur in the WSA. Refer to Appendix 4 and the Affected Environment, Vegetation and Wildlife Including Special Status Species sections of the Utah BLM Statewide Wilderness Final EIS for additional information. Cougar also use the WSA. Although these species add to the wilderness values of the WSA, they are not confined to the Beartrap Canyon study area.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of this WSA would not add a combination of potential natural vegetation (PNV) ecosystems not presently represented in the NWPS, but it would add a PNV ecosystem (Colorado Plateau Arizona pine forest) not now represented in the NWPS in Utah.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and

BEARTRAP CANYON WILDERNESS STUDY AREA

is not necessarily the vegetation that is currently present in an area.

The WSA is in a transition zone between the Colorado Plateau Province/Ecoregion and the Rocky Mountain Forest Province/Ecoregion. The PNV in both ecoregions in the WSA is Arizona pine forest (20 acres in each province). This information is summarized in Table 2 from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of Las Vegas, Nevada. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of this population center.

**TABLE 2
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	3	26,300	8	20,030
NATIONWIDE (ROCKY MOUNTAIN FOREST PROVINCE)				
Arizona Pine Forest	2	24,902	3	1,213
UTAH (COLORADO PLATEAU PROVINCE)				
Arizona Pine Forest	0	0	8	20,030
UTAH (ROCKY MOUNTAIN FOREST PROVINCE)				
Arizona Pine Forest	2	24,902	3	1,213

Source: BLM File Data.

**TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS**

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
Las Vegas, Nevada	38	3,132,130	54	2,176,458

Source: BLM File Data.

C. Balancing the Geographic Distribution of Wilderness Areas

The Beartrap Canyon WSA would not contribute significantly to balancing the

geographic distribution of wilderness areas within the NWPS.

As of January, 1987, the NWPS include 65 wilderness areas comprising 2,898,792 acres in Utah, Arizona, and Nevada.

BEARTRAP CANYON WILDERNESS STUDY AREA

Twelve designated wilderness areas are within 100 miles of the WSA. In a clockwise direction beginning to the north, are the 7,000-acre Ashdown Gorge Wilderness (Forest Service [FS]), the 25,751-acre Box-Death Hollow Wilderness (FS), the 112,400-acre Paria Canyon-Vermilion Cliffs Wilderness (BLM), the 40,539-acre Saddle Mountain Wilderness (FS), the 70,500-acre Kanab Creek Wilderness (FS and BLM units), the 6,860-acre Cottonwood Point Wilderness (BLM), the 7,880-acre Mt. Trumbull Wilderness (BLM), the 14,650-acre Mt. Logan Wilderness (BLM), the 37,030-acre Grand Wash Cliffs Wilderness (BLM), the 87,900-acre Paiute Wilderness (BLM), the 18,630-acre Beaver Dam Mountains Wilderness (BLM), and, to the west, the 50,000-acre Pine Valley Mountain Wilderness (FS).

Manageability (The area must be capable of being managed effectively to preserve its wilderness character.)

Overall the WSA could be effectively managed to preserve its wilderness character. Administration of visitor access would be difficult because the WSA is surrounded by private lands. Visitor use can be monitored and controlled through cooperative effort by BLM and NPS.

The WSA receives relatively little use. There is no livestock use in the WSA. Recreational use of the WSA is nearly nonexistent due to its steep terrain. Recreational visitors spend only about 10 visitor days annually in the WSA. Access between the WSA and Zion National Park requires technical rock climbing skills because of high cliffs. There are no private or State inholdings to interfere with wilderness management. There is one post-FLPMA lease in the WSA, but the probability of development is low and the wilderness protection stipulation would apply. There are no mining claims or other valid rights in the WSA.

Energy and Mineral Resource Values

The U.S. Geological Survey (USGS) and the U.S. Bureau of Mines (USBM) prepared a mineral assessment report for the Beartrap Canyon WSA (USGS Bulletin 1746-E, R.E. Van Loenen, et, al., 1989). The report indicates that the WSA has a moderate energy resource potential for oil and gas. Mineral resource potential is

low for undiscovered resources of all metals, including silver and uranium. The WSA is in an area defined as having low terrestrial heat flow and therefore the energy resource potential for geothermal resources is low. There is no potential for coal and gypsum.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on wilderness values which is considered to be the only pertinent resource that would be significantly affected by designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

Social and economic factors were not considered to be significant issues in the EIS.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 28 inputs specifically addressing this WSA were received from 33 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as additional inputs or signatures. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 28 commenters supported wilderness designation for part or all of the WSA, while two commenters were opposed. Three commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented that wilderness designation would complement proposed wilderness in adjacent Zion National Park. Those commenting in

BEARTRAP CANYON WILDERNESS STUDY AREA

favor of wilderness were almost evenly from rural and urban Utah and other states.

Those opposing wilderness were concerned that the WSA is too small to be a designated wilderness and lacks solitude and outstanding opportunities for primitive recreation. Both comments were from rural Utah.

One Federal agency, the NPS, commented on the Draft EIS for the Beartrap Canyon WSA. The NPS supported wilderness designation for the WSA and provided information on potential for endangered species in the area.

No comment letters were received on the Final EIS.

There are no State sections in the WSA. In commenting on the Draft EIS, the State of Utah expressed general opposition to wilderness designation but did not take a definite position regarding wilderness designation of the WSA. The State commented that the less than 5,000-acre areas surrounding Zion National Park, including the Beartrap Canyon WSA, are natural, logical extensions of Zion National Park. The State noted that there are land use conflicts found in gas company reports on the area. These reports identify oil and gas potential in LaVerkin Creek Canyon, Deep Creek, North Fork Virgin River, Red Butte, Spring Creek Canyon, The Watchman, Taylor Creek Canyon, Goose Creek Canyon and Beartrap Canyon WSAs. The State suggested that given the small size of the units and their adjacency to Zion National Park, additional study should be given to the potential of transferring most of these WSAs from BLM to NPS management. The BLM and NPS agree that transferral of administration is a separate issue, independent of the wilderness review.

The State also noted that the mineral potential of the area is probably low, and commented that the Draft EIS had not considered available cultural information from archeological surveys on FS land to the north of the WSA.

The Beartrap Canyon WSA is in Washington County. The Washington County Master Plan identifies the WSA as an open space

zone, and the Washington County Commission has indicated that they do not support wilderness designation for this WSA. The County Commission has endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM lands in Utah. In commenting on the Draft EIS, the county has stated that the WSA should be transferred from BLM to NPS jurisdiction through legislative enactment of a park expansion bill.

BEARTRAP CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives	
Issue Topic	No Action/No Wilderness
<p>Recommendation All Wilderness (40 Acres)</p>	
<p>Impacts on Wilderness Values</p>	<p>Wilderness values would not be preserved by wilderness designation. No disturbance that would affect wilderness values would be expected in the foreseeable future.</p>

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