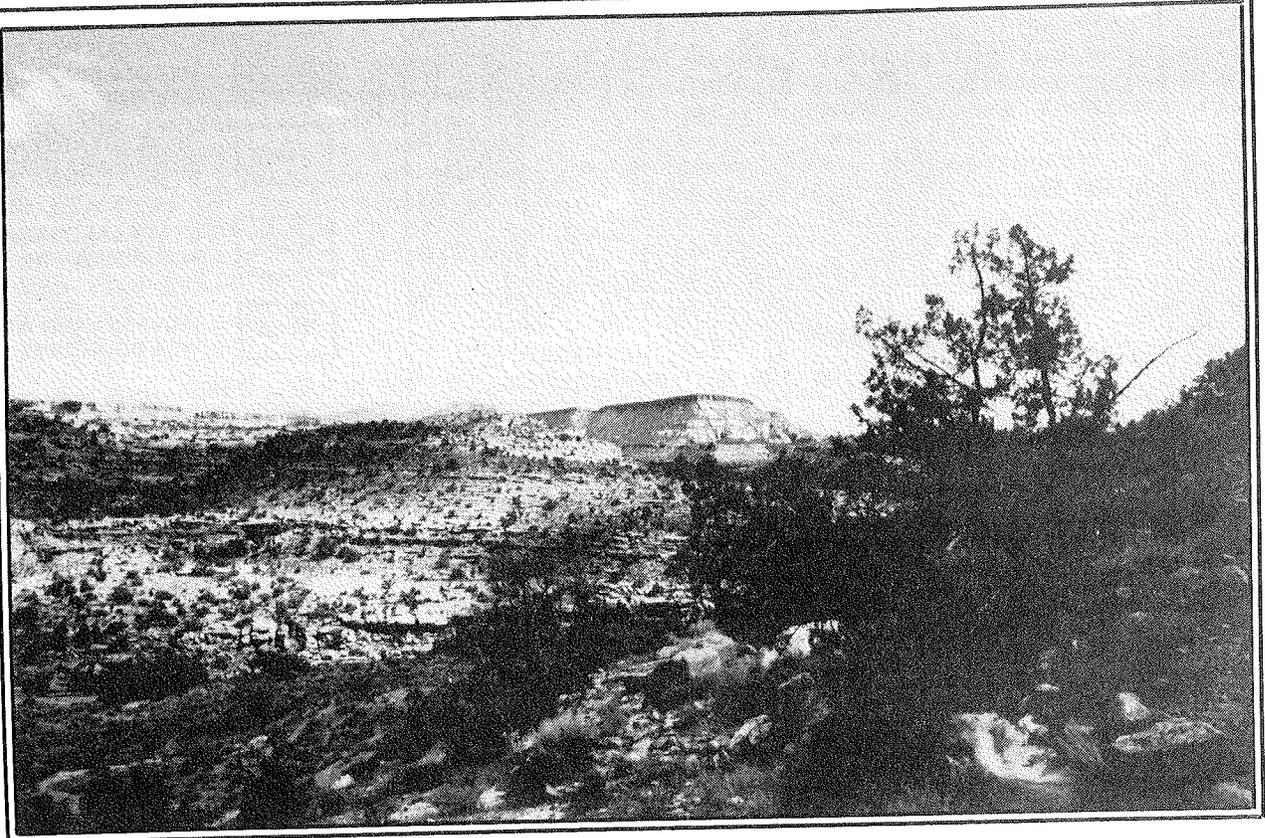
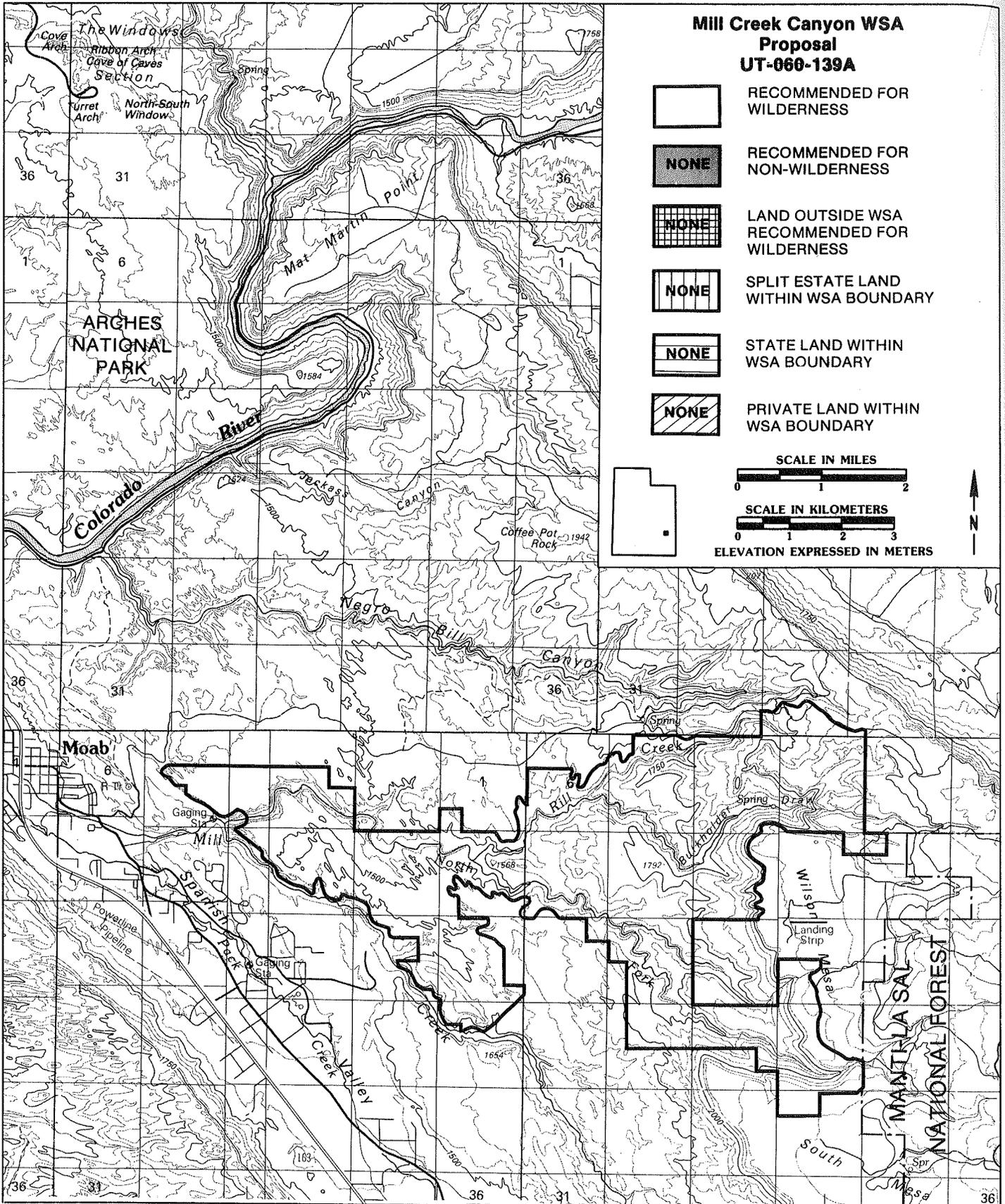


Mill Creek
Canyon WSA



MILL CREEK CANYON WSA



T. 25 S.

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October 1991

MILL CREEK CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 9,780 acres

The Mill Creek Canyon Wilderness Study Area (WSA) (UT-060-139A) is in Grand County, about 1 mile east of Moab, Utah (population 5,333). The WSA is an irregularly shaped unit that extends about 4 miles from north to south and 7 miles from east to west. The study area is west of and adjacent to the Moab Ranger District of the Manti-La Sal National Forest. State and private lands are adjacent to the WSA on the east, north, and south. The remaining boundaries are along cliffs and mesa slopes (see Map). The WSA contains 9,780 acres of public land administered by the Bureau of Land Management (BLM). There are no private, State, or split-estate land in-holdings in the WSA (see Table 1).

Deep canyons and escarpments characterize the WSA. Elevations range from about 4,400 feet on Mill Creek at the western end of the WSA, to 7,000 feet on Wilson Mesa at the eastern end of the WSA. Blackbrush is the predominant type of vegetation, dominant in some parts of the study area and mixed with pinyon-juniper in other parts 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 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.

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

WITHIN THE WSA	ACRES
BLM (surface and subsurface)	9,780
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
Total	9,780
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	9,780
BLM (outside the WSA)	0
Split-Estate within the WSA)	0
Split-Estate (outside the WSA)	0
Total BLM land recommended for wilderness	9,780
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

MILL CREEK CANYON WILDERNESS STUDY AREA

2. RECOMMENDATION AND RATIONALE:

- 9,780 acres
(recommended for wilderness)
- 0 acres
(not recommended for wilderness)

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.

All of the WSA is essentially natural in condition. Almost one-third of the WSA has outstanding opportunities for solitude and primitive recreation. Oil and gas, potash, and uranium and vanadium resources may exist in the WSA, but the potential for their development is considered to be low. The value of the area for wilderness purposes outweighs the value of potential mineral uses.

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 9,780 acres of the WSA remain essentially natural in character.

A trail was once bladed into the North Fork of Mill Creek but it now fades out half way to the bottom of the drainage and becomes a cattle trail. Conventional seismic exploration activity was conducted in the southwestern portion of the WSA between Mill Creek (outside of the WSA) and the North Fork of Mill Creek. The seismic lines totaled 3 miles in length. Small scale post-FLPMA placer gold exploration occurred near Wilson Mesa. Overall, there are 4 miles of vehicular ways in the WSA. All of these intrusions are substantially unnoticeable.

Since establishment of the WSA, a number of placer gold explorations and helicopter seismic activities have occurred.

The placer gold explorations were as follows:

1. Three exploratory trenches just inside the eastern edge of the WSA disturbed approximately 1 acre. Reclamation was completed in 1986.

2. Seven hand-dug holes approximately 3 feet deep, and about 65 three feet deep backhoe holes to determine the depth of the gold ore body. Reclamation was completed in 1986.

3. One trench (1 ft. by 3 ft. by 100 ft.) and one pit (6 ft. by 6 ft. by 9 ft.), resulting in approximately 2 acres of disturbance. Reclamation was to be completed in 1990.

4. An in-stream placer gold exploration was conducted in 1984. The disturbance was minimal because the claimant used a hand-held vacuum dredge in the potholes in the stream. The plan of operations was determined to be nonimpairing. No reclamation was required and the equipment was removed.

5. One unauthorized placer gold activity occurred within the WSA, resulting in one hole on an old seismic line at the eastern end of the WSA. The disturbance was less than 1 acre and reclamation has been completed.

The helicopter seismic operations, conducted in 1983 and 1984, were determined to be nonimpairing and all necessary reclamation has been completed.

Upon final reclamation of the placer gold exploration activities, the entire WSA will meet the Wilderness Act criteria for naturalness.

B. Solitude

Overall, a 2,800-acre portion of the WSA meets the outstanding criterion for solitude. The balance of the WSA, 6,980 acres, does not meet the outstanding criterion for areas under wilderness review.

The WSA offers outstanding opportunities for solitude within portions of the unit due to the variety of the topography. The area does not give the visitor a feeling of vastness. The configuration

MILL CREEK CANYON WILDERNESS STUDY AREA

of the WSA is of considerable importance in assuring protection of the wilderness values. The WSA is basically shaped like an hourglass, the center being constricted down to about a 0.5 mile in width. The main branch of Mill Creek is not included in the WSA but instead is adjacent to the western boundary of the WSA. A constriction is also found along the west side where the unit narrows down to about a 0.5 mile. Private land on Wilson Mesa intrudes into the eastern portion of the area creating two legs, one encompassing the North Fork of Mill Creek and one encompassing Burkholder Draw to the north. The Mill Creek constriction narrows to a 0.5 mile for a distance of 0.75 of a mile. The narrow constrictions inhibit the ability to protect existing opportunities for solitude from potential uses outside the WSA.

Sheer canyon walls provide vertical separation and screening. The depth and winding nature of the canyon enhances topographic screening. In the eastern half of the canyon, the cliff walls become less sheer, with several side canyons branching off the main drainage. Vertical separation is not so pronounced here. The winding nature of the eastern half of the canyon also provides some screening. The side canyons that branch off the main drainage provide additional topographic screening. Topographic screening is also provided by sandstone fins in the western part of the unit near the canyon mouth. The upper elevations of the unit consist primarily of wind-blown sand and sandstone formations. Some topographic screening is provided by this uneven terrain. Narrowness of the canyon can detract from the solitude when many people are in the area by limiting their opportunity to avoid each other.

Significant vegetation screening is provided by riparian vegetation along Mill Creek Canyon and by moderately dense pinyon-juniper growth in the eastern portion of the WSA. Vegetation screening diminishes in the canyon bottom in the upper portion of Mill Creek, and is absent in slickrock and low brush and grass-covered areas.

The area of outstanding solitude is principally associated with the North

Fork of Mill Creek in the western half of the WSA. This area, combined with the nearby redrock fins, comprises about 2,800 acres of outstanding solitude opportunities. Solitude is limited in the central, southwestern and southeastern portions of the unit where the WSA is constricted to areas of a 0.5 mile.

Sights and sounds of human activity outside the WSA are present from some locations within the WSA. The western edge of the WSA borders Mill Creek and, in places, comes close to housing developments in Moab in the vicinity of Kayenta Heights and the Highlands. Agricultural activities exist on private land adjacent to the WSA on Wilson Mesa. Vehicle noise from these sources can be heard within portions of the WSA. The Sand Flats Road provides a portion of the northern boundary of the WSA. Traffic on this road is visible and can be heard from within the WSA. Distant sounds of trucks on U.S. Highway 191 can be heard at high points within the area.

A visitor has no problem finding a secluded spot in the North Fork of Mill Creek and in Burkholder Draw. However, seclusion in the central, southwestern, and southeastern portions of the WSA is difficult to find.

C. Primitive and Unconfined Recreation

Overall, primitive recreation opportunities meet the standard for outstanding on approximately 2,800 acres (30 percent of the WSA) in the canyon and fins areas, and do not meet the standard in the remaining 70 percent of the area (6,980 acres).

Portions of the canyon provide outstanding opportunities for hiking, camping, backpacking, and nature study. Sandstone fins near the mouth of the canyon provide excellent photographic opportunities. The WSA is of limited value for hunting and fishing.

D. Special Features

Sandstone fins near the mouth of Mill Creek are scenic geologic features.

Peregrine falcons and bald eagles, listed as endangered species, and six

MILL CREEK CANYON WILDERNESS STUDY AREA

other animal species that are considered sensitive may occur within the WSA.

The Jones cycladenia, Cylcadenia humilis var. jonesii, a threatened plant species, and one other plant species that is considered sensitive may also occur within 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 WSA has approximately 20 miles of perennial streams. Mill Creek is one of the few side drainages to the Colorado River in Utah that contains a perennial stream with several small waterfalls. This is of particular significance when considering its proximity to the community of Moab, making it easily available for public use.

Portions of the WSA contain outstanding examples of prehistoric Indian rock art.

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 (9,780 acres), which is well-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 (Five 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 wilderness and other BLM study areas within a 5-hour drive of these population centers.

C. Balancing the Geographic Distribution of Wilderness Areas

The Mill Creek Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS.

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,134,225
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,696,418

Source: BLM File Data.

MILL CREEK CANYON 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	2,249,895
Provo-Orem, Utah	11	721,793	90	2,777,088

Source: BLM File Data.

As of January 1987, the NWPS included 93 areas comprising 5,475,207 acres in Utah and Arizona and Colorado the adjacent states nearest the WSA.

A Mill Creek Canyon Wilderness would supplement the NWPS in the Canyonlands Section of the Colorado Plateau, however, where there are just two established wilderness areas, totalling 70,751 acres. There are four designated wilderness areas within 100 miles of the WSA. About 50 miles southwest of the WSA is the 45,000-acre Dark Canyon Wilderness (U.S. Forest Service [FS]), to the southeast, in Colorado are the 41,189-acre Lizard Head Wilderness (FS) and the 16,505-acre Mount Sneffels Wilderness (FS), and to the east of the WSA, also in Colorado, is the 11,180-acre Black Canyon of the Gunnison Wilderness (National Park Service [NPS]).

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

The Mill Creek Canyon WSA can be managed as wilderness to preserve the values now present in the area. Current uses such as livestock grazing and maintenance of a 0.25 mile of fence would continue with little or no effect on wilderness values. Even though there are 320 acres of post-FLPMA oil and gas leases in the WSA, the leases are subject to nonimpairment of wilderness values and it is expected that they will expire and not be renewed.

There are 2,080 acres of mining claims in the WSA but because of low resource potentials, development is not expected following wilderness designation.

There are no private or State in-holdings or other valid rights in the WSA that would significantly 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 assessment report for the Mill Creek Canyon WSA (USGS Bulletin 1745, Michael F. Diggles, et al., N.D.). The report indicates that field work was conducted in 1988. No mineral resources were identified in the WSA. Placer gold is present in the eastern part of the study area but not in sufficient quantity to be considered a resource. Eolian sand and sandstone occur in the study area, but it is unlikely that these will be developed. No geothermal resources are known to exist in the study area.

The entire study area has a high potential for undiscovered mineral resources of potash and halite (rock salt), and areas underlain by the Navajo Sandstone also have high potential for resources of flagstone. The top of Wilson Mesa also has high resource potential for small deposits of placer gold. The entire WSA has moderate potential for resources of uranium, thorium, copper, vanadium, oil and gas, and carbon dioxide and has low potential for resources of helium and 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.

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Local Social and Economic Considerations

The opportunity for leasable and locatable minerals exploration would be foregone. However, the loss of development potential would not be significant because there is only low certainty that economically recoverable minerals are in the WSA. There could be a slight decrease initially in the amount of recreational income to the local area due to the loss of off-highway vehicle (OHV) opportunities. This loss may be negated with an increase in primitive recreation use. The potential Federal revenues for oil and gas leasing (\$18,838) would be lost. Expenditures for mineral exploration would not occur. Overall, the regional effect on economics would be small.

Summary of WSA-Specific 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 167 inputs specifically addressing this WSA were received from 181 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, 168 commenters supported wilderness designation for part or all of the WSA, while six 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, special features in the WSA, and opportunities for primitive recreation, and noted that wilderness designation would protect the particular values in the WSA. A slight majority of those commenting in favor of wilderness were from other states.

Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development and restrict public access. Those opposing wilderness designation were from rural Utah and from other states.

No Federal agencies commented on the Draft EIS for this WSA.

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 Mill Creek Canyon WSA has moderate wilderness values and high conflicts compared with the other WSAs in the region. According to the State, conflicts include a moderate potential for potash, uranium/vanadium and petroleum; grazing; and future vegetation manipulation for wildlife. The State suggested that some management designation be studied to protect the unique perennial stream in the WSA.

The Mill Creek Canyon WSA is in Grand County. The Grand County Master Plan does not specifically address the WSA. The plan generally emphasizes continuation of present uses and maximizing mineral development. The Grand County Commission is opposed to wilderness designation and 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 Commission stated that the Mill Creek Canyon WSA should not be designated wilderness because only a small part of it has wilderness values and there is a moderate potential for development of oil, gas, potash, and uranium. The Commission supports conventional multiple use management of the WSA to facilitate the local movie industry, mountain biking, and other varied recreational pursuits. The commission believes that the geology and ecology of the area is essentially identical to features already within FS wilderness and National Parks in the region.

MILL CREEK CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

Issue Topic	Recommendation	Alternatives	No. Action/No. Wilderness
All Wilderness (9,780 Acres)	Wilderness designation would preserve the wilderness values in the WSA.		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 41 acres and indirectly reduced in quality on up to 1,467 acres. The loss would be due to mineral exploration activities. Special features would not be significantly affected. Vehicular use of 4 miles of ways and future exploration roads would occasionally detract from opportunities for solitude and primitive recreation in the WSA.
Impacts on Mineral and Energy Exploration and Production	The opportunity for leaseable and locatable minerals exploration would be foregone. However, the loss of development potential would not be significant because there is only low certainty that economically recoverable minerals are in the WSA and the probability of development is low even if the WSA is not designated wilderness.		Oil and gas or other minerals exploration or development would not be affected because mineral leasing, location of mining claims and development would not be restricted for protection of wilderness values.

MILL CREEK CANYON WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Recommendation All Wilderness (9,780 Acres)	Alternatives	No Action/No Wilderness
Impacts on Recreation	Future vehicular use would be eliminated with this alternative. This would not be significant regionally because there are other suitable ORV areas nearby. Primitive recreation use would increase and would require management guidance to prevent loss of the inherent recreational values.		The quality of the primitive recreation opportunity would be reduced on disturbed areas (41 acres) and surrounding areas. It is projected that both primitive and vehicular recreation use would steadily increase in the WSA and without management constraints, inherent recreational values could be reduced. Some primitive recreation use may be displaced with ORV-related use in the future, especially if new mineral-related access is developed. This impact, however, will be tempered with ORV management that would limit future ORV use to designated roads and trails.
Impacts on Economic Conditions	With this alternative, economic conditions in Grand County would be about the same as with the No Action/No Wilderness Alternative because recreation use would increase and no major mineral or other economic developments would be foregone. Federal revenues would decrease due to the loss of leasing rental fees and possible future mineral exploration opportunities.		The economics of the local recreation-related businesses would be beneficially affected by the projected increase in recreational use. Also, additional mineral leasing revenues could be expected with this alternative. Although these increased revenues may not significantly affect the economy of Grand County, they would appreciably increase the income of several local businesses.