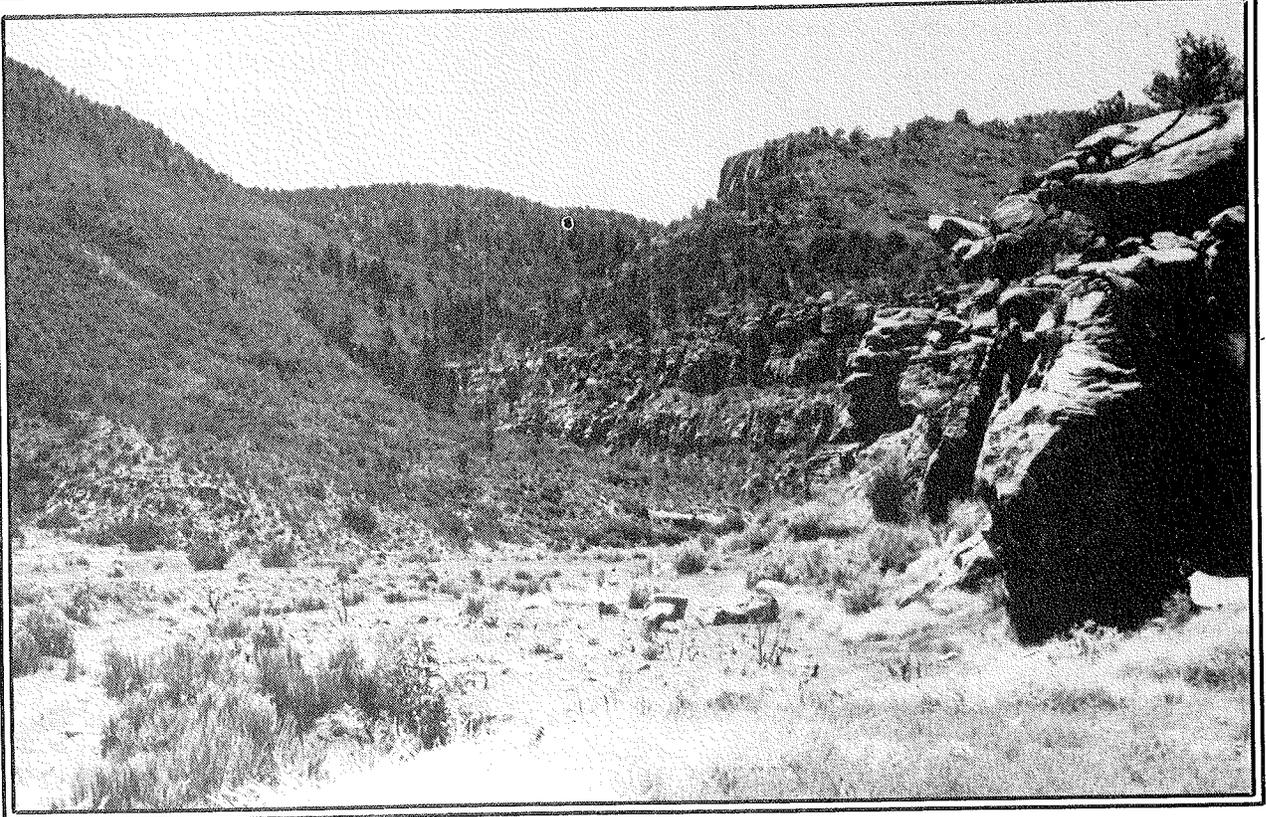


Spruce Canyon  
WSA



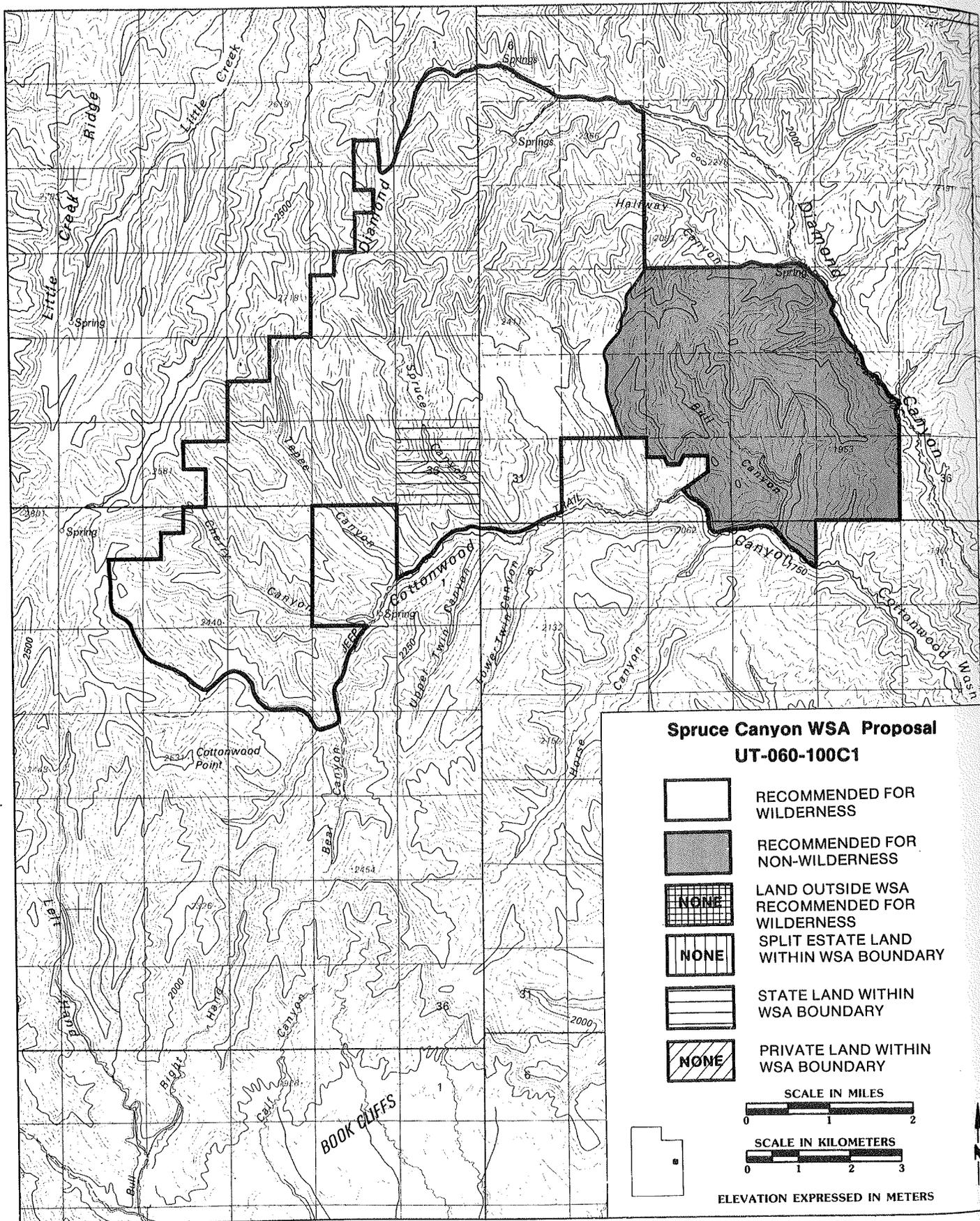
# SPRUCE CANYON WSA

R. 21 E.

R. 22 E.

T. 18 S.

T. 19 S.



## Spruce Canyon WSA Proposal UT-060-100C1

-  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

**SPRUCE CANYON WILDERNESS STUDY AREA**

**1. THE STUDY AREA: 20,350 acres**

The Spruce Canyon Wilderness Study Area (WSA) (UT-060-100C) is in Grand County, about 35 miles northeast of Green River, Utah (population 1,048). The study area is slightly crescent-shaped, extending about 5 miles from north to south and 9 miles from east to west. The WSA is contiguous with the Coal Canyon WSA (UT-060-100C) to the southwest and with the Flume Canyon WSA (UT-060-100B) to the northeast, and is one of seven contiguous WSAs in the Book Cliffs area.

Roads and State sections define the WSA on the north, east, and south; legal subdivisions, which delineate the southeastern corner of a large block of State land, form the western boundary (see Map). There are 20,350 acres of public land administered by the Bureau of Land Management (BLM) in the WSA. One State section (640 acres) is inheld within the WSA and is in the portion recommended for wilderness designation (see Table 1).

**TABLE 1  
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA<sup>a</sup>**

<b>WITHIN THE WSA</b>	<b>ACRES</b>
BLM (surface and subsurface)	20,350
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	640
<b>Total</b>	<b>20,990</b>
<b>WITHIN THE RECOMMENDED WILDERNESS BOUNDARY</b>	
BLM (within the WSA)	14,736
BLM (outside the WSA)	0
Split-Estate (within the WSA)	0
Split-Estate (outside the WSA)	0
<b>Total BLM land recommended for wilderness</b>	<b>14,736</b>
In-holdings (State, private)	640
<b>WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS</b>	
BLM	5,614
Split-Estate	0
<b>Total BLM land not recommended for wilderness</b>	<b>5,614</b>
In-holdings (State, Private)	0

Source: BLM File Data

<sup>a</sup> The Appendix is a detailed table of in-holdings included within the portion of the WSA recommended for designation.

The study area is in the rugged terrain of the Book Cliffs and extends to the top of the Roan Cliffs. Several V-shaped canyons drain southward to Cottonwood

Canyon, which is the southern boundary of the WSA. In the higher, northern portion of the WSA, a number of canyons that slope southeastward are the upper

## SPRUCE CANYON WILDERNESS STUDY AREA

portion of the Diamond Canyon drainage. Steep, narrow ridges divide the canyons. Elevations range from 5,500 feet in Cottonwood Canyon in the southwest tip of the WSA to 8,500 feet on Diamond Ridge in the northwest. More than 90 percent of the vegetation in the WSA is Douglas fir forest and pinyon-juniper woodland. The remainder of the area has riparian vegetation or sagebrush, depending on location along a stream or dry soils, respectively.

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 14,736 acres would be designated as wilderness and 5,614 acres would be released for uses other than wilderness, which is the recommendation in this report; no wilderness (no action) alternative; and an all wilderness alternative.

### 2. RECOMMENDATION AND RATIONALE:

- 14,736 acres  
(recommended for wilderness)
- 5,614 acres  
(not recommended for wilderness)

The recommendation for this WSA is to designate 14,376 acres as wilderness and to release the remaining 5,614 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 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 additional information on acquisition.

All of the area recommended for wilderness designation is in a natural condition and has outstanding opportunities for solitude and primitive recreation. Scenic, ecological, and wildlife values are exceptional. The area is contiguous

to and would complement the management of a 48,000-acre tract of State land that is roadless.

Coal resources may exist in the western portion of the recommended area. Known coal resources are south of the WSA. If present, the coal is at considerable depth. If mining were to occur it would be in the long-term future after the more accessible coal in the region is mined. Because of these uncertainties, conflict with potential coal recovery does not outweigh the wilderness values in the recommended area. The potential for oil and gas deposits is also high in the recommended portion of the WSA, but the rugged terrain severely constrains access. Other locations in the vicinity, including the eastern part of the WSA, are more feasible for development.

Although the eastern part of the WSA, which is not recommended for wilderness designation, is in a natural condition and has outstanding opportunities for solitude and primitive recreation, it also has potential for economical recovery of oil and gas. The area is part of a known geologic structure and is relatively accessible. The oil and gas potential outweighs the importance of the wilderness values in the eastern part 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 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 for naturalness. Approximately 16,350 acres (80 percent of the WSA) are considered to be untouched. Grazing has taken place on ridges and in canyon bottoms but not on the steep side slopes. Mineral exploration has taken place in tributaries to Diamond and Cottonwood Canyons. These areas total about 4,000 acres (20 percent of the WSA).

## SPRUCE CANYON WILDERNESS STUDY AREA

The area generally appears to have been unaltered by man. Human imprints are not substantially noticeable within the WSA as a whole and will be restored by natural processes. Imprints include dry drill holes that affect a total of 10 acres and a vehicular way that extends into the WSA for about 1 mile in a side canyon off Diamond Canyon. There are no post-FLPMA imprints within the WSA.

### B. Solitude

All in all, the entire WSA (20,350 acres) meets the requirements for outstanding opportunities for solitude. The large size and blocky configuration of the WSA contribute to a feeling of vastness, and the WSA's rugged terrain and isolation provide outstanding opportunities for the visitor to find solitude.

The rugged topography provides screening that obscures the sights and sounds of other visitors within the WSA. The vertical distance between the ridge tops and canyon bottoms (as much as 1,000 feet) provides opportunities for seclusion. These opportunities are more pronounced in the northwestern portion of the WSA.

The effectiveness of vegetation screening on steep slopes is diminished by the wide bands of rock exposures. In the higher elevations, Douglas fir forest is more dense, and enhances screening. Areas of mountain shrubs provide dense thickets but screening potential varies with overall height of the vegetation. Canyon bottoms covered with sagebrush generally do not provide screening from slopes and ridgetops above.

Sights and sounds from outside the WSA are temporary and include drilling along boundary roads, pipeline maintenance, and the use of mechanized equipment along the perimeter of the WSA.

The deeply incised, branching drainages within the WSA provide many travel routes that allow dispersion of recreational use.

### C. Primitive and Unconfined Recreation

All in all, the entire WSA meets the requirements for outstanding opportuni-

ties for primitive and unconfined recreation.

Although lack of water in the interior of the WSA and the steepness and height of the slopes limits primitive recreation opportunities somewhat, the many drainages and the dissected terrain provide several potential hiking routes up canyon bottoms and along ridge tops. Opportunities for hiking, backpacking, and hunting are considered outstanding throughout the WSA. The Spruce Canyon WSA is between Coal and Flume Canyon WSAs. Logical travel routes include the various drainages at the northern end of the WSAs. A travel route exists from a road at the end of Sego Canyon along the Roan Cliffs all the way to Cottonwood Canyon, a straight line distance of about 9 miles. Primitive recreation opportunities are enhanced by combining the opportunities available in adjacent WSAs.

### D. Special Features

The WSA is part of a critical watershed. The WSA is an integral part of the Book Cliffs ecosystem and links Coal Canyon and Flume Canyon WSAs.

Some erosional features of scenic interest within the WSA are pinnacles, balanced rocks, alcoves, overhangs, pot-holes, and arches.

Approximately 76 percent (15,500 acres) of the WSA is rated as outstanding for scenic quality.

The WSA has year-round populations of cougar, elk, and black bear, which are wildlife species associated with wilderness.

Black-footed ferrets, listed as an endangered species, and six other animal species and one plant species that are considered sensitive may inhabit or frequent 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.

**SPRUCE 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 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. Forty-seven percent of the WSA is actually Douglas fir forest. The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is entirely juniper-pinyon woodland (20,350 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 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 5 hours drive of these population centers.

**TABLE 2  
ECOSYSTEM REPRESENTATION**

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
<b>NATIONWIDE (COLORADO PLATEAU PROVINCE)</b>				
Juniper-Pinyon Woodland	11	1,401,745	84	2,123,655
<b>UTAH (COLORADO PLATEAU PROVINCE)</b>				
Juniper-Pinyon Woodland	1	26,000	53	1,685,848

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	2,239,235
Provo-Orem, Utah	11	721,793	90	2,766,518

Source: BLM File Data.

## SPRUCE CANYON WILDERNESS STUDY AREA

### C. Balancing the Geographic Distribution of Wilderness Areas

The Spruce Canyon WSA could contribute to balancing the geographic distribution of wilderness areas within the NWPS. As of January 1987, the NWPS included 44 areas comprising 3,443,330 acres in Utah and in Colorado, the adjacent state nearest the WSA.

A Spruce Canyon Wilderness would supplement the NWPS in the Uinta Basin Section of the Colorado Plateau where there are no established wilderness areas. There are two designated wilderness areas within 100 miles of the WSA. To the south is the 45,000-acre Dark Canyon Wilderness (U.S. Forest Service [FS]) and to the east 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 portion of the WSA that is recommended for wilderness can be managed to preserve values now present in the area. Livestock grazing and maintenance of existing fences would continue but would not significantly affect wilderness values in the area. There are 2,132 acres of pre-FLPMA oil and gas leases in the WSA. About 1,612 acres of the leases are in the area recommended for wilderness.

Because of the oil and gas potential of the WSA, BLM projects that leases will be explored and may be developed in the recommended wilderness area following designation. However, because of the limitations of the terrain, it is expected that only about 34 acres will be disturbed. This would not affect the overall manageability of the area.

There are presently no mining claims in the recommended area, and the probability of future valid claims is low.

Provision of access to and activities on one section (640 acres) of State land in-held in the portion of the WSA recommended as wilderness could affect wilderness values and uses in the surrounding wilderness. BLM would be obligated to provide access to the State

section and could not administratively control development on State land. However, the in-held section is on the extreme southern boundary of the recommended wilderness and therefore likely would not affect the overall manageability of the area.

The nonrecommended area also could be effectively managed as wilderness.

There are 520 acres of pre-FLPMA oil and gas leases in the nonrecommended area where the terrain is more accessible. BLM projects that up to 40 acres of the nonrecommended area would be disturbed by oil and gas activities following wilderness designation but this would not affect the overall manageability of the 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 Spruce Canyon WSA (USGS Bulletin 1753-A, Robert P. Dickerson, et al., 1990). The report indicates that no deposits of industrial minerals are known to be in the WSA. The WSA has a high resource potential for undiscovered deposits of coal and for undiscovered oil and gas. There is a moderate resource potential for tar sand in the northwestern parts of the WSA, and a low potential for tar sand and for resources of oil shale, gilsonite, uranium and other metals, and 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

With BLM's recommended partial wilderness designation, present economic conditions would not be affected. The length of oil and gas employment in the WSA would be reduced because oil and gas could not be developed on 65 percent of the area.

Annual local sales and Federal revenues related to livestock grazing could be

## SPRUCE CANYON WILDERNESS STUDY AREA

reduced by \$100 and \$8 respectively as compared to the No Action/No Wilderness Alternative. Potential annual Federal and State revenues from oil and gas leasing fees could be reduced by \$11,228. Annual royalty payments from leases in the nondesignated area and on pre-FLPMA leases in the designated area would not be reduced, but potential royalties of up to \$100,000 per year from wells on 65 percent of the WSA would be foregone. Recreation-related local sales would be about the same as with the No Action/No Wilderness Alternative because both motorized and primitive use would increase. Federal revenues from commercial recreation use would increase as this type of recreation use increases.

### 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 70 inputs specifically addressing this WSA were received from 105 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, 94 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 and lack of mineral-related conflict in the WSA. The majority of those commenting in favor of wilderness were almost equally from urban Utah and other states. Of particular concern was the need to protect wilderness values and wildlife habitat in the WSA. Those opposing wilderness were concerned that wilderness would preclude mineral exploration and development and

restrict livestock grazing management and public access. Most of those opposing wilderness designation were from rural Utah. No Federal agencies specifically commented on the Draft EIS for this WSA.

No comment letters were received on the Final EIS.

There is one State section (640 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 for the WSA. The State commented that the Spruce Canyon WSA has moderate wilderness values and moderate conflicts compared with the other WSAs in the region. According to the State, coal, oil and gas, and livestock conflicts are present. The State noted that wildlife values could be protected by designation of the area as an Area of Critical Environmental Concern, rather than as wilderness. The State questioned the relationship between the size of a potential oil and gas field and favorability; suggested that a better estimate of the size of the coal resource would be helpful; and requested information about the model used to predict the number of potential cultural resource sites in the WSA.

The Spruce 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 Spruce Canyon WSA cannot be effectively managed as wilderness because of pre-FLPMA oil and gas leases. The Commission also noted that designation of the area as wilderness would be contrary to the County's overall planning goals and would create negative impacts on the economic future of Grand County.

# SPRUCE CANYON WSA

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

		Alternatives		
		Recommendation Partial Wilderness (14,736 Acres)	No Action/No Wilderness	All Wilderness (20,350 Acres)
Issue Topic	Wilderness Values	Wilderness values would be preserved overall in the designated area which is approximately 72 percent of the WSA. In the foreseeable future, naturalness and opportunities for solitude and primitive recreation would be directly lost on 579 acres because of mineral exploration and development, construction of access roads to in-held State lands, and watershed projects. Opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to 4,130 acres. Almost all of the impact would be in the non-designated area. Special features would not be significantly affected. Some Class A scenery would be reduced in quality in the disturbed and adjacent areas and some wilderness dependent species would temporarily leave the area. Vehicular use of new roads in the non-designated portion would 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 713 acres because of vegetation treatments, oil and gas exploration and development construction of access to in-held State lands, and watershed projects. Opportunities for solitude and primitive recreation would be indirectly reduced in quality on up to an additional 5,088 acres of the WSA. Special features would generally not be significantly affected. Some Class A scenery would be reduced in quality in disturbed and surrounding areas and some wilderness dependent wildlife species would leave the area during the period of disturbance. Vehicular use of 1 mile of way and up to 20 miles would detract from opportunities for solitude and primitive recreation.	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 49 acres and indirectly reduced in quality on up to an additional 611 acres because of oil and gas exploration, development on pre-FLPMA leases, and construction of access to in-held State lands. Special features generally would be preserved, although some Class A scenery would be reduced in quality on the disturbed and surrounding areas.
Impacts on Vegetation		Approximately 2.9 percent (579 acres) of the vegetation in the WSA would be modified. Vegetation types and special status plant species would not be significantly modified with this alternative because the potential for major disturbance would be reduced on 65 percent (13,124 acres designated without pre-FLPMA leases) of the WSA. In addition, protective measures would be required on the remainder of the area.	Approximately 3.5 percent (713 acres) of the vegetation in the WSA would be modified with this alternative. The Category 2 candidate species that may be located in the WSA would not be significantly affected because protective measures would be required.	Vegetation types and special status plant species would be protected because potential surface disturbance would be reduced from 713 acres to 49 acres and the area would be closed to ORV use.

# SPRUCE CANYON WSA

**Table 4 (Continued)  
Comparative Summary of Impacts by Alternative**

		Alternatives	
Issue Topic	Recommendation Partial Wilderness (14,736 Acres)	No Action/No Wilderness	All Wilderness (20,350 Acres)
Impacts on Mineral and Energy Exploration and Production	Partial wilderness designation would preclude or constrain potential exploration and development of an unknown portion of 10 to 50 million barrels of oil and 60 to 300 billion cubic-feet of natural gas that may occur in the WSA because only 35 percent of the WSA could be developed for oil and gas. 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 a portion of the WSA is not designated wilderness.	Implementation of this alternative would not adversely affect mineral exploration or production because mineral leasing, location of mining claims and mineral developments could occur without restriction for the protection of wilderness values.	The portion to the projected 10 to 50 million barrels of oil and 60 to 300 billion cubic feet of natural gas in the pre-FLPMA leases in the WSA could be produced. Recovery of an unknown but locally significant amount of oil and gas would be foregone because only 10 percent (2,132 acres) of the WSA could be developed for oil and gas.
Impacts on Wildlife Habitat and Populations	Wildlife would benefit from a reduced acreage of surface disturbance when compared to the No Action/No Wilderness Alternative. Only 2.9 percent (579 acres) of the habitat in the WSA would be disturbed. Approximately 500 acres of vegetation treatment would be allowed in the nondesignated portion, which would benefit some wildlife. Wildlife would not receive the additional benefit of solitude on the 5,614 acres not designated. Crucial deer and elk winter range would be disturbed. Special status species would not be significantly affected because protective measures and mitigation would be required.	Implementation of the land treatment would benefit some wildlife species and population levels by providing additional forage and ecotones. Surface disturbance on 3.5 percent (713 acres) of the habitat in the WSA may displace or reduce populations of some wildlife species during the lifetime of the projects. Crucial deer winter range would be disturbed. Special status species would not be significantly adversely affected because protective measures and mitigation would be required.	Only about 0.24 percent (49 acres) of the habitat in the WSA would be disturbed. Wilderness designation would preclude the proposed land treatment project which would have benefitted some wildlife species. Most wildlife species would benefit due to the preservation of solitude and crucial habitat. Special status species would be protected.

# SPRUCE CANYON WSA

## Table 4 (Continued) Comparative Summary of Impacts by Alternative

	Alternatives	
Issue Topic	No Action/No Wilderness (20,350 Acres)	All Wilderness (20,350 Acres)
<p><b>Recommendation</b> Partial Wilderness (14,736 Acres)</p> <p>Livestock management practices and grazing levels would not be significantly affected. Only 4 AUMs of potential forage would be foregone because vegetation treatment would not be allowed.</p>	<p>With this alternative, there would be no changes in livestock use or management techniques. Surface disturbances resulting from mineral exploration and development would reduce forage production by about four AUMs per year. This would not significantly impact grazing. The proposed 542-acre burning and seeding project could be completed to provide an additional 68 AUMs of livestock forage and to improve livestock distribution.</p>	<p>No change in livestock authorization would occur with this alternative. Restrictions on predator control would result in slightly increased costs of livestock management for one livestock permittee in a sheep allotment. The proposed 542-acre burning and seeding that would produce 68 AUMs would not be allowed.</p>
<p><b>Impacts on Local Economic Conditions</b></p> <p>Present economic conditions would not be affected. The length of oil and gas employment in the WSA would be reduced because oil and gas could not be developed on 65 percent of the area. Annual local sales and Federal revenues related to livestock grazing could be reduced by \$100 and \$8 respectively as compared to the No Action/No Wilderness Alternative. Potential annual Federal and State revenues from oil and gas leasing fees could be reduced by \$11,228. Annually royalty payments from leases in the designated area and on pre-FLPMA leases in the designated area would not be reduced, but potential royalties of up to \$100,000 per year from wells on 65 percent of the WSA would be foregone. Recreation-related local sales would be about the same as with the No Action/No Wilderness Alternative because both motorized and primitive use would increase. Federal revenues from commercial recreation use would increase as this type of recreation use increases.</p>	<p>Present economic conditions would not be affected. Oil and gas exploration and development would increase employment in Grand County by 1.0 percent (40 jobs) by the year 2010. There would be only minor changes in local economic conditions. Recreation-related local sales could contribute up to \$12,485 to the local economy by the year 2020. The WSA could contribute up to \$12,400 annually in local livestock sales and \$955 in grazing fees. Oil and gas leasing fees and royalty payments could contribute from \$40,700 to over \$250,000 per year in Federal and State revenues. Federal revenues from commercial recreation outfitting (currently \$150 annually) would continue.</p>	<p>Present economic conditions would not be significantly affected. Employment for oil and gas exploration and development would be reduced by 30 jobs, 0.75 percent of the projected Grand County employment in the year 2010, as compared to the No Action/No Wilderness Alternative. Potential annual local sales and Federal revenues related to livestock grazing could be reduced by \$1,360 and \$105 respectively. Potential annual Federal and State revenues from oil and gas leasing fees could be reduced by \$36,436, and potential royalties of up to \$100,000 per year from wells on 90 percent of the WSA would be foregone. Recreation-related local sales could contribute up to \$12,485 annually to the local economy by the year 2020. Federal revenues from commercial recreation use would probably increase as this type of use increases.</p>

**SPRUCE CANYON WILDERNESS STUDY AREA**

Appendix  
Estimated Costs of Acquisition of Non-Federal Holdings Within Areas Recommended for Designation <sup>a</sup>

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) (Processing Costs)
T. 18 S., R. 21 E., Sec. 36	640.00		State	No	Exchange	\$2,000

<sup>a</sup> 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.