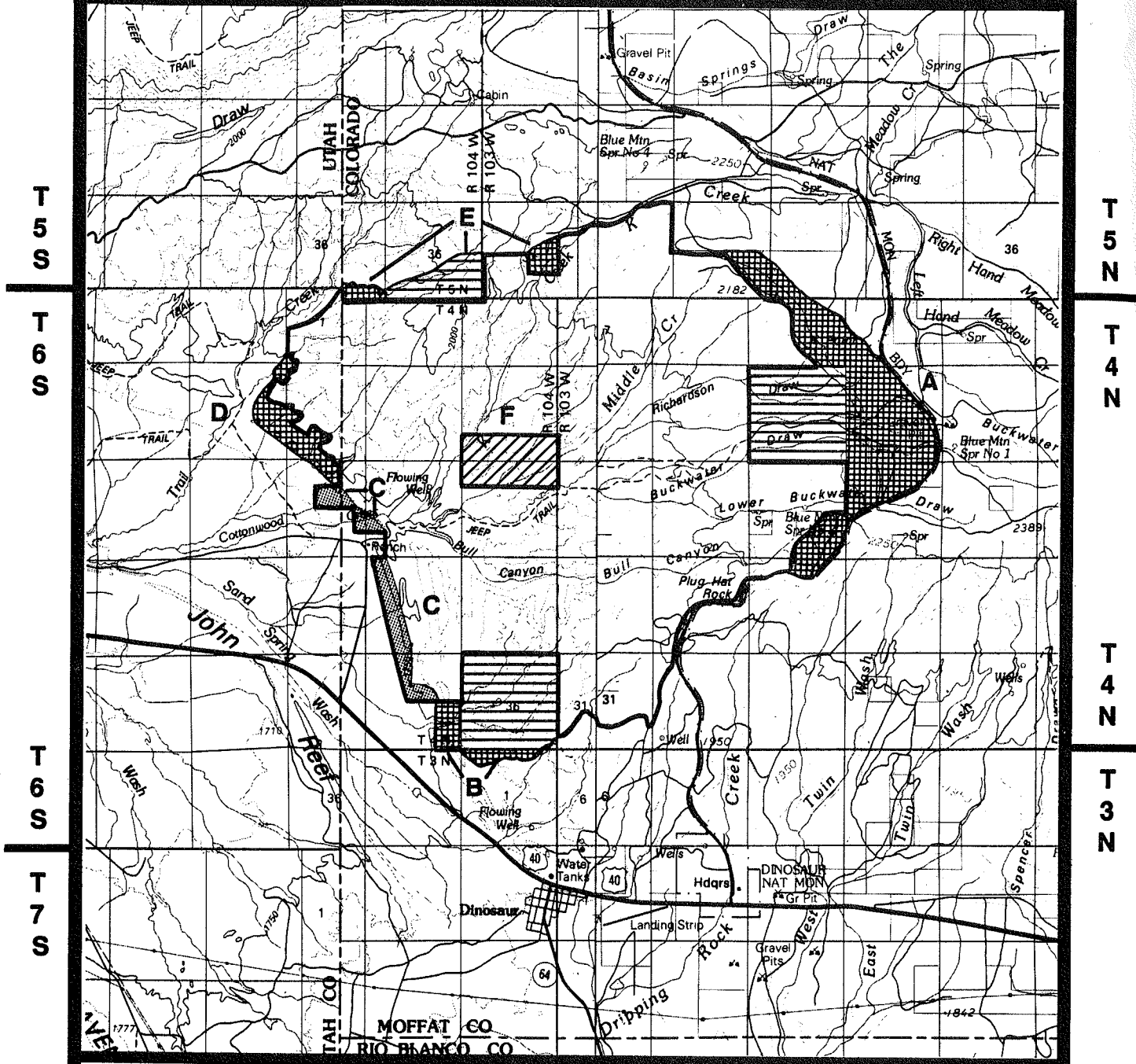








**Bull Canyon  
Wilderness Study Area**

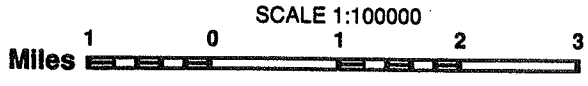


R 25 E

R 104 W

R 103 W

- |   |   |   |                     |
|---|---|---|---------------------|
|  | RECOMMENDED FOR WILDERNESS                  |  | SPLIT ESTATE (NONE) |
|  | RECOMMENDED FOR NONWILDERNESS               |  | STATE               |
|  | LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS |  | PRIVATE             |



**Bull Canyon WSA  
Proposal  
CO-010-001 and UT-080-419**

January 1991

**BULL CANYON WILDERNESS STUDY AREA**

**THE STUDY AREA:** 12,297 acres

The Bull Canyon WSA (CO-010-001 and UT-080-419) is located in Moffat County, Colorado, and in Uintah County, Utah, approximately 4 miles north of Dinosaur, Colorado. The WSA includes 12,297 acres of BLM lands (11,777 acres in Colorado and 520 acres in Utah) and a 320-acre private inholding in Colorado (see Table 1). Three sections of state lands (1,920 acres) adjoin the WSA in Colorado. The area is bounded on the north, east, and south by ways on BLM land and state land property lines and to the west and northwest by topographic features and state and private property lines. The WSA is shown on the map.

The study area is more characteristic of the arid canyon ecosystem found in the Colorado Plateau than in the Rocky Mountain Forest Province ecoregion in which this WSA is located. Geographically, the area is cut by deep ridges and canyons of sandstone eroded by rain and snowmelt waters. Interesting geology with colorful cliffs, a maze of canyons, and unique rock formations are a result of deep erosion. Elevations range from 5,600 feet on K Creek in Utah to 7,400 feet on the northern boundary. The vegetation includes semi-arid species such as sagebrush and pinyon-juniper communities, with riparian zones along the drainages.

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

<b>TOTAL ACREAGE</b>	
<b>WITHIN THE WSA</b>	<b>ACRES</b>
BLM (surface and subsurface)	12,297
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	320
<b>Total</b>	<b>12,617</b>
<b>WITHIN THE RECOMMENDED WILDERNESS BOUNDARY</b>	
BLM (within the WSA)	12,150
BLM (outside the WSA)	1,550
Split-Estate (within the WSA)	0
<b>Total BLM land recommended for wilderness</b>	<b>13,700</b>
In-holdings (State, private)	1,855
<b>WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS</b>	
BLM	220
Split-Estate	0
<b>Total BLM land not recommended for wilderness</b>	<b>220</b>
In-holdings (State, Private)	0

Source: BLM File Data

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

**BULL CANYON WILDERNESS STUDY AREA**

**TABLE 1 (Continued)  
LAND STATUS AND ACREAGE SUMMARY OF THE STUDY AREA**

<b>UTAH</b>	
<b>WITHIN THE WSA</b>	<b>ACRES</b>
BLM (surface and subsurface)	520
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	0
<b>Total</b>	<b>520</b>
<b>WITHIN THE RECOMMENDED WILDERNESS BOUNDARY</b>	
BLM (within the WSA)	480
BLM (outside the WSA)	140
Split-Estate (within the WSA)	0
<b>Total BLM land recommended for wilderness</b>	<b>620</b>
In-holdings (State, private)	0
<b>WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS</b>	
BLM	40
Split-Estate	0
<b>Total BLM land not recommended for wilderness</b>	<b>40</b>
In-holdings (State, Private)	0

Source: BLM File Data

**BULL CANYON WILDERNESS STUDY AREA**

**TABLE 1 (Continued)  
LAND STATUS AND ACREAGE SUMMARY OF THE STUDY AREA**

COLORADO	
WITHIN THE WSA	ACRES
BLM (surface and subsurface)	11,777
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	320
Total	12,097
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within the WSA)	11,670
BLM (outside the WSA)	1,410
Split-Estate (within the WSA)	0
Total BLM land recommended for wilderness	13,080
In-holdings (State, private)	1,855
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	180
Split-Estate	0
Total BLM land not recommended for wilderness	180
In-holdings (State, Private)	0

Source: BLM File Data

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Craig District Wilderness Final Environmental Impact Statement (EIS) published November 5, 1990. Three alternatives were analyzed in the EIS. The boundary adjustment alternative recommends 13,700 acres as wilderness; the result of 12,150 acres of the original WSA, adding 1,550 acres from outside the WSAs and eliminating 220 acres from the original WSA. The all wilderness alternative (the original WSA 12,297 acres), and the no wilderness alternative were also considered.

RECOMMENDATION AND RATIONALE

13,700 acres  
(recommended for wilderness)

220 acres  
(recommended for nonwilderness)

The recommendation is to designate approximately 13,700 acres of BLM public land as wilderness and release 220 acres

for uses other than wilderness (boundary adjustment A alternative). This area is shown on the map. This recommendation is the environmentally preferable alternative. This recommendation includes an area larger than the original WSA and would result in the least change in the natural environment over the long term.

In order to protect the wilderness values and define the unit, the area's boundaries have been adjusted by locating them along easily identifiable topographic and manmade features rather than administrative boundaries (e.g., section lines). These boundary adjustments would result in more effective management and enhance opportunities for solitude, primitive and unconfined recreation, and protect the viewshed of the area. It would also protect the viewshed of the heavily traveled Park Service road and Escalante overlook. Management of the wilderness area would also be enhanced by the blocked configuration. The addition of all or portions of three state land sections would complement and fur-

## BULL CANYON WILDERNESS STUDY AREA

ther block up the area, providing easily identifiable boundaries.

The northern and eastern boundary would be realigned along a road and fence on K Point ridge and follows the Dinosaur National Monument access road which is fenced and easily identified on the ground (see parcel A on map). This area also contains critical elk habitat (summer range). A boundary adjustment in the southwest corner of the area would add an entire watershed in steep rugged terrain and includes most of a state land section. The recommended boundary follows a way on the south.

Other small parcels on the northwest boundary have been added to the recommended area to further block the area and provide an identifiable boundary along a ridge top to the west and an existing way along the northern boundary.

Approximately 220 acres along the western boundary are recommended for wilderness designation (see Map). The boundary has been situated along a ridge top and would eliminate the western slopes of the ridge facing away from the WSA.

Approximately 50 acres (parcel B on the map) adjacent to the Plug Hat Rock Picnic Area, has been eliminated from the recommended area in order to accommodate a small proposed campground. The 50 acres is both within and outside the original WSA. The site is well screened by vegetation and topography and is bordered on the east by the Dinosaur National Monument access road.

Bull Canyon is recommended because of the outstanding scenery and opportunities for solitude and primitive and unconfined recreation and the presence of special features. The Bull Canyon area includes vistas from the National Park Service Plug Hat Rock Overlook and the Nature Trail, the Escalante Overlook as well as the maze of canyons and colorful geology in Bull Canyon, Buckwater Draw, Middle Creek, and K Creek which converge into a wide valley to the west. The canyons provide access for hiking, backpacking, hunting, rock climbing, photography, and other recreation pursuits.

The relatively low elevation and proximity to U.S. Highway 40 makes the area easily accessible for wilderness recreation opportunities throughout the year.

The Bull Canyon WSA is within a 4 to 5 hour drive of the Salt Lake City, Utah metropolitan area, about 6 hours from the Denver, Colorado metropolitan area, and approximately 3 hours from Grand Junction, Colorado.

Designation of the Bull Canyon WSA as wilderness would preserve an area of scenic, undeveloped, canyon lands. The area is more representative of the semi-arid ecosystems, geologic and topographic features found in the Colorado Plateau area rather than in the Rocky Mountain Forest physiographic features found in the Colorado Plateau area rather than in the Rocky Mountain Forest physiographic region. Pinyon-juniper, sagebrush, and native grasses and forbs are the main vegetation communities. Douglas fir, cottonwoods, boxelder, and willows comprise the often dense riparian vegetation found along drainages in the WSA. Bull Canyon, in its natural state, complements the natural features present in Dinosaur National Monument to the north. The National Park Service has integrated the natural and historic features of this WSA and surrounding area into its visitor education programs through the placement of interpretive facilities along the Harpers Corner access road (Plug Hat Rock picnic area overlooks and Natural Trail, and Escalante overlook) that borders and provides vistas of the Bull Canyon complex. Wilderness designation of Bull Canyon would protect the natural and historic features, as well as scenic vistas, of the area.

No major manageability problems or resource conflicts would result from wilderness designation. No new range improvements have been proposed and no conflicts with range management are expected. Portions of two livestock grazing allotments lie within the recommended area with an estimated 920 animal unit months (AUMs) of livestock forage available. Existing range improvements within the proposed area consist of two developed springs with watering troughs, seven stock ponds, and 3.5 miles of fence. Maintenance of these existing range improvements would continue.

Oil and gas potential in the area is considered to be low according to the U.S. Geological Survey and U. S. Bureau of Mines report for the area and the WSA is not considered prospectively valuable for any mineral resources.

## BULL CANYON WILDERNESS STUDY AREA

### CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

#### Wilderness Characteristics

##### Naturalness

The Bull Canyon WSA is predominantly natural with negligible human imprints. The area is cut by deep scenic canyons and ridges of colorful sandstone, all of which drain to the west and converge in the west central portion of the WSA into a wide basin.

Elevations within the proposed area span some 2,100 feet ranging from 5,700 feet in Utah to 7,880 feet at K Point to the northeast.

The vegetation consists of semi-arid ecosystems with pinyon pine and juniper woodlands as the dominant community as well as sagebrush, native grasses, forbs, and saltbush plant community. Riparian areas along the drainages contain boxelder, cottonwood, and willow at times in dense stands. Douglas fir trees are found in scattered areas within the canyons.

Minor imprints within the recommended area consist of two developed springs with watering troughs, seven stock ponds, and 3.5 miles of fence. These imprints are scattered and screened by vegetation and topography making them substantially unnoticeable within the area.

The entire WSA is winter range for mule deer and most of the area is habitat for elk with about 600 acres of critical habitat (summer range) for elk within the WSA and additional critical elk habitat within the large addition of parcel A on the map. Golden eagles nest within the area as do many other birds and the area is habitat for many other mammals, reptiles, and amphibians.

##### Solitude

The diverse topography, dense vegetation, and the areas blocked configuration all combine to provide outstanding opportunities to experience solitude throughout the WSA. The recommended area provides additional room for visitors to disperse and become isolated. The ruggedness and natural character of the area prevent outside influences from affecting the visitor's experience of solitude.

On the higher elevations, a visitor may view the vast open space created by the

basin, which is accented by the scenic backdrop of Cliff Ridge in Utah. This open space, plus the isolation afforded by the numerous canyons, enhances the opportunities for solitude.

##### Primitive and Unconfined Recreation

The entire area offers outstanding opportunities for primitive and unconfined recreation such as hiking, backpacking, camping, and scenic viewing. Bird watching, nature study, and horseback riding also occur in the area. Opportunities for photographing the area's natural beauty are exceptional.

The gradual stream gradients which lead out of K Creek, Middle Creek, Buckwater Draw, and Bull Canyon offer superb, rugged desert hikes. Buckwater Draw is enclosed by striking sandstone cliffs that have alcoves for exploring. Bull Canyon has spectacular, sheer cliffs that provide a scenic backdrop for challenging hikes in the rugged upper end of the canyon. Middle Creek provides easy hikes along the ridgetops or up the canyon with interesting rock formations and multicolored geology over to and in the K Creek drainage. These areas provide nesting for hawks, eagles, owls, and other birds. Coyote and deer may be seen in the late evening along hilltops and drainages.

##### Special Features

The Dominguez/Escalante Expedition of 1776 reportedly camped within the west central portion of the WSA. The history of the encampment is well documented and recounts that the expedition drew water from a flowing well and hunted buffalo there.

The National Park Service (Dinosaur National Monument) manages two overlook sites (Plug Hat Picnic Area and Escalante Overlook) adjacent to this area. The picnic area overlooks the WSA and interpretive signs and a natural trail describe the area's geology and history. National Park Service statistics for 1989 indicate 105,126 visitors traveled the Harper's Corner Road leading to the canyons of Dinosaur National Monument and paralleling the WSA. Many visitors frequent the picnic site and overlooks for the breathtaking vista into and over the WSA.

The University of Arizona has studied relict pinyon pine in the area to establish dendrochronological data on climate extending more than 600 years into the past. Although none is currently pro-

**BULL CANYON WILDERNESS STUDY AREA**

posed, continued research in the Bull Canyon area is anticipated. This would not affect wilderness characteristics.

A portion of the WSA is identified as critical habitat (summer range) for elk.

Significant paleontological resources have been found in the vicinity of the WSA and are likely to occur within the WSA.

Diversity in the National Wilderness Preservation System

Assessing the diversity of natural systems and features as represented by ecosystems:

Wilderness designation of this WSA would add a landform and ecosystems which currently have little representation in the National Wilderness Preservation System (NWPS). Bull Canyon WSA is in the central part of the Rocky Mountain Forest Province with juniper-pinyon woodland (5,520 acres) and sagebrush steppe (6,777 acres) ecosystems. The sagebrush steppe ecosystem is not represented in Colorado wilderness and the juniper-pinyon ecosystem is represented by only

one small area in Colorado and only two small areas nationwide. Dinosaur National Monument to the north is representative of these ecosystems, and although portions are administratively endorsed for wilderness designation, they are not part of the NWPS. The landforms are more characteristic of the Colorado Plateau than the Rocky Mountain Forest Province (see Table 2).

Expanding the opportunities for solitude or primitive recreation within a day's driving time (5 hours) of major population centers:

The Bull Canyon WSA is within a days drive of two major population centers in Utah and within 6.5 hours drive from Denver, Colorado. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a 5-hour drive of the population centers.

Balancing the geographic distribution of wilderness areas:

The Bull Canyon WSA would contribute to balancing the geographic distribution of areas within the NWPS. The nearest designated wilderness is the High Uintas wilderness (460,000 acres) some 70 miles

**TABLE 2  
ECOSYSTEM REPRESENTATION**

	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
<b>BAILEY-KUHLER CLASSIFICATION (PNV)</b>				
<b>NATIONWIDE (ROCKY MOUNTAIN FOREST PROVINCE)</b>				
Juniper-Pinyon Woodland	2	41,451	22	167,864
Sagebrush Steppe	4	76,129	22	241,526
<b>COLORADO (ROCKY MOUNTAIN FOREST PROVINCE)</b>				
Juniper-Pinyon Woodland	1	11,181	16	119,424
Sagebrush Steppe	0	0	9	31,960

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	685,088	42	1,826,904
Provo-Orem, Utah	12	730,088	52	2,307,031

Source: BLM File Data.



## BULL CANYON WILDERNESS STUDY AREA

to the northwest in Utah. However, the landforms and ecosystems are different than those found in the Bull Canyon WSA. Part of Dinosaur National Monument to the north of the WSA has been administratively endorsed for wilderness designation but is not part of the NWPS. The Willow Creek and Skull Creek WSAs are recommended for wilderness designation and are immediately to the east, the Daniels Canyon WSA (2,495 acres adjacent to Dinosaur National Monument in Utah) some 10 miles to the northwest is not recommended for wilderness and an additional 10 study areas are within two to three hours of Bull Canyon. Four of the 13 WSAs in the region are recommended for wilderness designation. The Bull Canyon WSA is accessible year-round and expands opportunities to attain diverse wilderness experiences.

### Manageability

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

The recommended area can be effectively managed to preserve its wilderness character. The boundaries have been adjusted to include enough area to enhance and insure manageability. See the recommendation and rational section for a discussion of these boundary adjustments.

A developed campground is proposed to be located adjacent to the Plug Hat Rock Picnic Area. The site is well screened from the recommended area by vegetation and topography and is located outside of the recommended boundary.

The 320-acre private inholding in the center of the WSA (see map) is currently managed in a manner consistent with wilderness objectives; however, such management is subject to change at the discretion of the owner. BLM has concluded that the area is presently manageable as wilderness in spite of this concern. Possible exchange or acquisition of this land is currently being negotiated in order to ensure future compatible management.

The State School Trust Lands identified for acquisition (1,535 acres) would further enhance the manageability of the area. The blocked configuration of the unit enhances management by providing identifiable boundaries.

Existing range improvements consisting of two developed springs with watering troughs, seven stock ponds, and approximately 3.5 miles of fence would continue

to be maintained by the grazing permittees with the use of motorized vehicles, only if necessary. No new range improvements are proposed.

All subsurface minerals within the WSA are under federal ownership except for the 320-acre private inholding. The BLM is currently pursuing acquisition of the mineral rights for the inholding. There are no mining claims or leases that would encumber management of the recommended area.

### Energy and Mineral Resource Values

The Bull Canyon WSA energy and mineral values were evaluated in *Mineral Resources of the Bull Canyon Wilderness Study Area, Moffat County, Colorado, and Uinta County, Utah, U.S. Geological Survey Bulletin 1714 (1987)*.

The WSA has no identified resources and a low mineral resource potential for undiscovered mineral resources including all metals, uranium, and oil and gas.

No mines, prospects, or other mineral-related workings are found in or within 2 miles of the WSA. The Glen Canyon Sandstone which outcrops in the WSA is suitable for use as foundry sand, fracturing sand, and abrasive sand. However, there is currently no local market for these common materials and high transportation costs preclude long distance shipment of the material. This resource is readily available elsewhere.

No metallic mineral occurrences were identified at the ground surface and geochemical samples contained no anomalous concentrations of any metals. Therefore, the mineral resource potential is low for all metallic minerals as well as uranium.

The study area has low resource potential for oil and gas. The Middle Pennsylvanian (about 330 to 290 million years old) Weber Sandstone may be present beneath the WSA, but its oil and gas potential is unknown. Most of the oil at the Rangely oil field 12 miles to the southeast, was produced from the Weber. Since the USGS report was filed, information updated by BLM reveals that the density and distribution of the 60 plus shallow drill holes in the vicinity of the WSA, lack of production, negative test results, published analysis of the subthrust play and petroleum potential, and paucity of recent drilling activity suggest that the likelihood of the WSA to contain economic oil and gas deposits is minimal. The area is not prospective-

BULL CANYON WILDERNESS STUDY AREA

TABLE 4 (Continued)  
COMPARATIVE SUMMARY OF THE IMPACTS BY ALTERNATIVE

Impact Topics	Recommendation Boundary Adjustment	All Wilderness Alternative	No Wilderness Alternative
Impacts on Water Quality	Since no surface-disturbing activities would occur under the proposed action, there would be no change or impact to water quality.	Since no surface-disturbing activities would occur under the proposed action, there would be change or impact to water quality.	There would be an increase in sediment yield of up to 20 percent from the WSA in the short term, although there would probably be a long-term decrease of about 3 percent. The change in salts would be about half that of sediment. This would be an immeasurably small short-term contribution to, or long-term decrease in, sediment and salts in the White river. The long-term changes are well within the natural variation of up to 25 percent.
Impacts on Big Game Species (Populations and Habitat) and Eagles	Wildlife habitat would remain in present conditions. Animal numbers of 170 deer, 10 elk, and 2 pair of golden eagles would remain unchanged.	Wildlife habitat would remain in present conditions. Animal numbers of 170 deer, 10 elk, and 2 pair of golden eagles would remain unchanged.	There would be an increase of about 15 deer (to a total of 185) and 2 elk (to a total of approximately 12) currently using the WSA. No impacts to golden eagles or other raptors are anticipated because they would be protected.

BULL CANYON WILDERNESS STUDY AREA

TABLE 4 (Continued)  
COMPARATIVE SUMMARY OF THE IMPACTS BY ALTERNATIVE

Impact Topics	Recommendation No Action/No Wilderness	Boundary Adjustment Alternative	All Wilderness Alternative
Impacts on Mineral Exploration and Production	The area (13,700 acres) would be closed to mineral entry. The low potential for exploration and development of oil and gas would be precluded. No subsurface geologic data would be gained.	The area (12,297 acres) would be closed to mineral entry. The low potential for exploration or development of oil and gas would be precluded. No subsurface geologic data would be gained.	The area (12,297 acres) would be open to leasing, exploration, and development; geologic knowledge of the area would be increased. The low potential of the WSA for oil and gas production or development could be realized. No production or development is projected, however.
Impacts on Private Lands	Acquisition of the adjoining state lands and the 320 acres of private land would be pursued. Current grazing and wildlife habitat uses of these lands would continue.	Acquisition of the adjoining state lands and the 320 acres of private land would be pursued. Current grazing and wildlife habitat uses of these lands would continue.	No impact or change in ownership of the 320 acres of private land or on adjacent state land is anticipated. Grazing and wildlife habitat uses of these lands would continue.

**BULL CANYON WILDERNESS STUDY AREA**

Table 5  
Estimated Cost of Acquisition of Non Federal Holdings Within Areas Recommended for Designation 1/

Legal Description (Prior to any Subdivision)	Total Acreage	Number of Owners 2/ (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 3/ (Land Costs)	Estimated Cost of Acquisition 3/ (Processing Costs)
T. 4 N., R. 104 W., Sec. 13 S1/2 S1/2 Sec. 24 N1/2 N1/2	320.00	4	Private	Yes	Purchase	\$8,000	\$30,000
T. 4 N., R. 103 W., Sec. 16	640.00	1	State	Yes	Exchange	N/A	\$8,000
T. 4 N., R. 104 W., Sec. 36	630.00	1	State	Yes	Exchange	N/A	\$8,000
T. 5 N., R. 104 W., Sec. 36 S1/2	265.00	1	State	Yes	Exchange	N/A	\$8,000

1/ Standard Disclosure: 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.

Processing costs are all miscellaneous expenses other than land costs including work month costs, appraisals, title work, escrow tests, etc.

2/ If a larger parcel has been recently subdivided or is jointly owned, this column represents the number of owners that could be involved in any acquisition negotiation.

3/ Where exchange is the proposed acquisition method, only administrative costs of processing the exchange are shown. Land costs would not be applicable. Where direct purchase is proposed, an estimate of both the land costs and the processing costs are provided.