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Rock Springs District Office

August 1990



Final Rock Springs Wilderness Environmental Impact Statement



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BLM-WY-ES-90-026-4332



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
WYOMING STATE OFFICE
P.O. BOX 1828
CHEYENNE, WYOMING 82003

Dear Reader:

This Final Wilderness Environmental Impact Statement (EIS) for the Rock Springs District, Wyoming, covers recommendations for 13 Wilderness Study Areas (WSAs). The potential environmental impacts of the alternatives were evaluated for each WSA. Designation of the entire WSA (All Wilderness) was evaluated for all WSAs. Nondesignation of the entire WSA (No Wilderness - No Action) was evaluated for all WSAs. Designation of part of the WSA was evaluated for 3 of the WSAs.

The 13 WSAs were studied for possible wilderness designation under the authority of Section 603 of the Federal Land and Policy Management Act of 1976 (FLPMA). The Bureau of Land Management's recommendations for the 13 WSAs will be forwarded to the Secretary of the Interior who will in turn forward his recommendation to the President. The President in turn will forward his recommendations to Congress. Only Congress can designate an area as wilderness. The next opportunity for public comment regarding whether or not these areas should be added to the National Wilderness Preservation System will be during the legislative process.

Thank you for your interest in the Bureau's wilderness study process. For further information, please contact: District Manager, Rock Springs District, Bureau of Land Management, P.O. Box 1869, Rock Springs, Wyoming 82902-1869.

Sincerely,

Ray Brubaker
Wyoming State Director

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FINAL

**ROCK SPRINGS WILDERNESS
ENVIRONMENTAL IMPACT STATEMENT**

for the

ROCK SPRINGS DISTRICT
(Fremont, Lincoln, Sublette, and Sweetwater Counties)

Prepared by:
U.S. Department of the Interior
Bureau of Land Management
Rock Springs District
Rock Springs, Wyoming

August 1990



Wyoming State Director

8-28-90

Date

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United States Department of the Interior
Bureau of Land Management

FINAL

**Wilderness Environmental Impact Statement
for the Rock Springs District Office**

() Revised Draft

(X) Final

Type of Action

() Administrative

(X) Legislative

Lead Agency: Department of the Interior, Bureau of Land Management

Cooperating Agencies: None

Counties Affected: Fremont, Lincoln, Sublette, and Sweetwater, Wyoming

ABSTRACT

This Final Environmental Impact Statement (EIS) for wilderness in the Rock Springs District summarizes the analysis of designation or non-designation of 13 Wilderness Study Areas (WSAs). The 13 WSAs cover a total of 217,282 acres of public land (including 2,520 acres of split estate - federal surface, State minerals). All or part of six WSAs, containing 133,148 acres of public land (including 2,315 acres of split estate - Federal surface, State minerals), are recommended for designation.

The Proposed Action recommends all of the Raymond Mountain (32,936 acres), Oregon Buttes (5,700 acres), and Devils Playground - Twin Buttes (23,841 acres) WSAs as suitable for designation. In addition, 6,080 acres of the Buffalo Hump WSA, 21,304 acres of the Sand Dunes WSA, and 37,287 acres of the Honeycomb Buttes WSA are also recommended as suitable for designation.

The following WSAs are not recommended as suitable for designation: Lake Mountain (13,865 acres), Alkali Draw (16,990 acres), South Pinnacles (10,800 acres), Alkali Basin - East Sand Dunes (12,800 acres), Red Lake (9,515 acres), Red Creek Badlands (8,020 acres) and parts of the Buffalo Hump WSA (4,220 acres), Sand Dunes WSA (5,805 acres), and Honeycomb Buttes WSA (3,261 acres).

Comments Were Requested From:

See Consultation and Coordination.

Draft EIS made available to the Environmental Protection Agency and the public.

Draft EIS: November 1988

Final EIS:

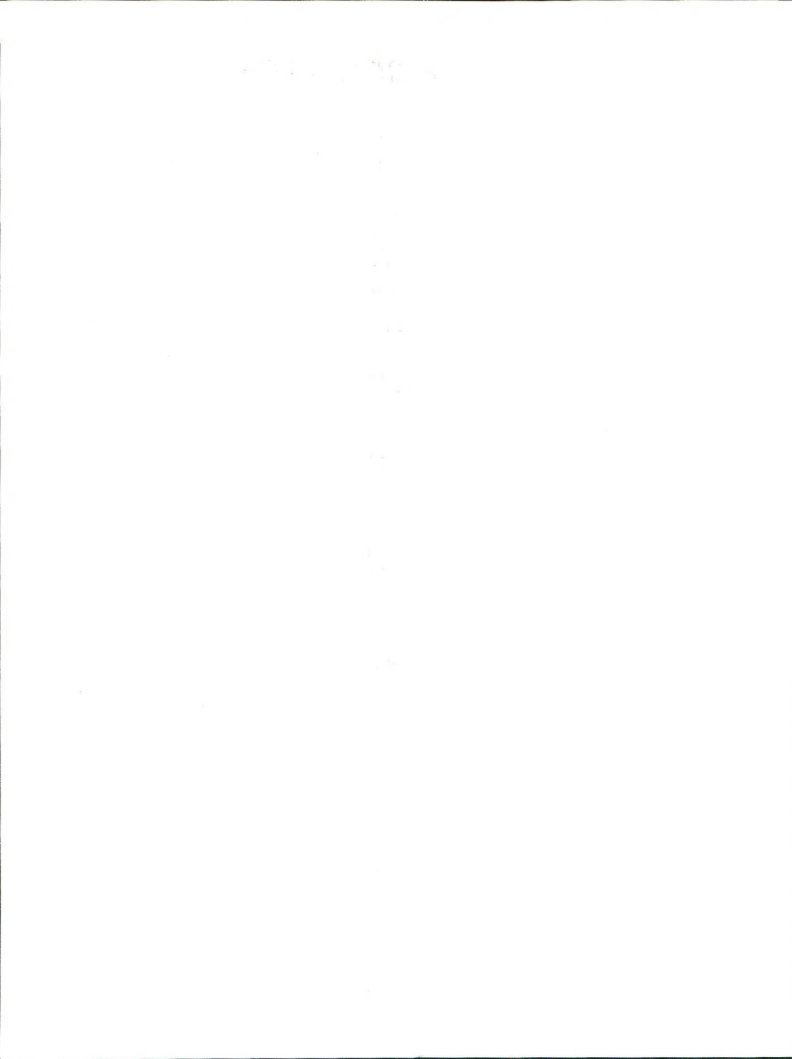


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SUMMARY

INTRODUCTION

This Final Environmental Impact Statement (EIS) analyzes the effects of designation or nondesignation, as wilderness, of 217,282 acres of public land in 13 wilderness study areas (WSAs) in southwest Wyoming. The EIS was prepared in response to Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA), which directs the Bureau of Land Management (BLM) to inventory, study, and report to Congress, through the Secretary of the Interior and the President, those public lands suitable for wilderness designation.

WILDERNESS SUITABILITY RECOMMENDATIONS

In the Revised Draft EIS (November 1988), it was assumed that State and private lands in wilderness areas would be acquired. The assumption was deleted from the Final EIS. Only public lands are included in the acreages in the Final EIS. If acquired, State and private lands would be included in designated wilderness areas.

Within the 13 WSAs, 217,282 acres of public land (including 1,920 acres of split estate - Federal surface, State minerals) are analyzed to determine the effects of designation or nondesignation of each area as wilderness. The BLM's Proposed Action is that 127,148 acres of public land, including split estate (Federal surface, State minerals), in 6 WSAs are recommended as suitable for designation. A total of 124,833 acres of Federal minerals would be withdrawn.

The Proposed Action is to recommend all of the Raymond Mountain (32,936 acres), Oregon Buttes (5,700 acres), and Devils Playground - Twin Buttes (23,841 acres) WSAs as suitable for designation. In addition, the Proposed Action is to recommend part of the 10,300-acre Buffalo Hump WSA (6,080 acres), part of the 27,109-acre Sand Dunes WSA (21,304 acres), and part of the 41,404-acre Honeycomb Buttes WSA (37,287 acres) as suitable for designation.

The following WSAs are not recommended as suitable for designation: Lake Mountain (13,865 acres), Alkali Draw (16,990 acres), South Pinnacles (10,800 acres), Alkali Basin-East Sand Dunes (12,800 acres), Red Lake (9,515 acres), Whitehorse Creek (4,002 acres), Red Creek Badlands (8,020 acres), part of the Buffalo Hump WSA (4,220 acres), part of the Sand Dunes WSA (5,805 acres), and part of the Honeycomb Buttes WSA (4,117 acres).

ALTERNATIVES CONSIDERED

Each WSA is analyzed in a site-specific analysis (Part 2). All Wilderness and No Wilderness alternatives are analyzed for all WSAs. Partial designation alternatives are analyzed for the Buffalo Hump, Sand Dunes, and Honeycomb Buttes WSAs. Table S-1 compares the acreage designated under the alternatives for each WSA. The alternatives for each WSA were considered independently of the other WSAs.

Lake Mountain WSA (13,865 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-1. The WSA has proven natural gas reserves, crucial winter range for an important naturally wintering elk herd, and the Rock Creek Area of Critical Environmental Concern (ACEC) which is habitat for the sensitive Colorado River cutthroat trout. Under All Wilderness, wilderness values would be preserved but substantial proven natural gas reserves (approximately 2,000 BCF from 7 producing wells) would be foregone. Under No Wilderness: oil and gas leases would include stipulations to protect winter range and the values of the ACEC (including the Colorado River cutthroat trout); in the ACEC, most resource conflicts would be resolved and most wilderness values would be preserved; and solitude and naturalness would be lost in parts of the WSA outside of the ACEC; there would be approximately 375 acres of surface disturbance from oil and gas activity, moss rock collection, and forestry activities. These factors led to selection of the No Wilderness alternative as the Proposed Action.

Raymond Mountain WSA (32,936 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-2. The WSA contains the Raymond Mountain ACEC which is habitat for the sensitive Bonneville cutthroat trout, moose, mule deer, and elk habitat, and receives substantial primitive recreation use (camping, backpacking, fishing, and hunting). Oil and gas potential for occurrence is high but there is no production in the vicinity of the WSA and none is anticipated in the near future. Under All Wilderness, wilderness values would be preserved in the entire WSA; 100 visitor days of snowmobile use would be eliminated annually; 39 BCF of natural gas and 530,000 board feet of forest products would be foregone; and the hab-

SUMMARY

TABLE S-1
PROPOSED ACTIONS AND ALTERNATIVES¹

Wilderness Study Area	Public Land Acres in WSA	Acres Recommended Suitable			
		Proposed Action ²	Alternative A ²	Alternative B ²	Alternative C ²
Lake Mountain	13,865	0	13,865	—	—
Raymond Mountain	32,936	32,936	—	—	—
Buffalo Hump	10,300	6,080	10,300	—	—
Sand Dunes	27,109	21,304	16,280	27,109	0
Alkali Draw	16,990	0	16,990	—	—
South Pinnacles	10,800	0	10,800	—	—
Alkali Basin-					
East Sand Dunes	12,800	0	12,800	—	—
Red Lake	9,515	0	9,515	—	—
Honeycomb Buttes	41,404	37,287	41,404	0	—
Oregon Buttes	5,700	5,700	0	—	—
Whitehorse Creek	4,002	0	4,002	—	—
Devils Playground-					
Twin Buttes	23,841	23,841	0	—	—
Red Creek Badlands	8,020	0	8,020	—	—
Total	217,282	127,148	—	—	—

¹ Alternatives should not be totaled for all 13 WSAs. Alternatives for each WSA were developed independently. This table is intended to display the alternatives analyzed for each WSA in this EIS.

² Acres of public land within WSA boundary recommended as suitable for designation as wilderness.

itat for the Bonneville cutthroat trout would be protected. Under No Wilderness, 39 BCF of natural gas would be produced from 23 producing wells; 530,000 board feet of forest products would be harvested; wilderness values would be preserved in most of the ACEC; and the habitat for the Bonneville cutthroat trout would be maintained. These factors led to selection of the All Wilderness alternative as the Proposed Action.

Buffalo Hump WSA (10,300 acres)

Three alternatives are analyzed: designate 6,080 acres, All Wilderness, and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-3. The WSA contains 3,072 acres of the 41,400-acre Greater Sand Dunes ACEC, natural ponds (water sources for livestock and wildlife), and stabilized and active sand dunes. The rails and ties were removed from a railroad bed which forms the eastern boundary of the WSA. Under All Wilderness, off-highway vehicle (OHV) use of part of the area designated would be foregone and no oil and gas production would be foregone. Under No Wilderness, the WSA would be open to OHV use, there would be no oil and gas production, and naturalness would be lost due to OHV use and oil and gas exploration. Under Partial Designation, most of the area suitable

for OHV recreation would not be designated, there would be no oil and gas production, and the ponds would be protected. All Wilderness and Partial Designation would protect solitude and other wilderness values. These factors led to selection of the Partial Designation alternative (6,080 acres) as the Proposed Action.

Sand Dunes WSA (27,109 acres)

Four alternatives are analyzed: designate 21,304 acres, designate 16,280 acres, All Wilderness, and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-4. The WSA contains 18,122 acres of the 41,400-acre Greater Sand Dunes ACEC, stabilized and active sand dunes, eolian ice cells, and ponds. The rails and ties were removed from a railroad bed which forms the western boundary of the WSA. All Wilderness would protect solitude and other wilderness values to the greatest degree, followed by the Proposed Action (designate 21,304 acres) and the smaller Partial Designation Alternative. Oil and gas production and OHV use would be foregone to the greatest degree by All Wilderness, followed by the Proposed Action, the smaller Partial Designation alternative, and No Wilderness. These factors led to selection of the larger Partial Designation alternative (designate 21,304 acres) as the Proposed Action.

SUMMARY

Alkali Draw (16,990 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-5. The Alkali Draw WSA is part of the Great Divide Basin-Red Desert area. There are 2,705 acres of pre-FLPMA leases. Under All Wilderness, there would be some oil and gas production from pre-FLPMA leases, but some oil and gas production would be foregone from unleased areas. Under No Wilderness, the geologic strata which suggest a former riparian habitat would be protected through stipulations on oil and gas leases to protect paleontological resources. There would be more opportunity for oil and gas production than under All Wilderness. Wilderness values would be lost in much of the WSA under both alternatives. These intrusions and the pre-FLPMA leases led to selection of the No Wilderness alternative as the Proposed Action.

South Pinnacles WSA (10,800 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-6. The South Pinnacles WSA is part of the Great Divide Basin-Red Desert area. The WSA is a rimrock area which contains numerous small draws, 6 trails, 1 dry hole marker from an oil and gas well, and pronghorn antelope habitat. Under All Wilderness, wilderness values would be preserved but oil and gas production would be foregone. Under No Wilderness, the rimrock features would be protected by stipulations restricting operations on steep slopes. Oil and gas production would not be foregone. Solitude would be lost due to oil and gas activity. These factors led to selection of the No Wilderness alternative as the Proposed Action.

Alkali Basin-East Sand Dunes WSA (12,800 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-7. The Alkali Basin-East Sand Dunes WSA is part of the Great Divide Basin-Red Desert area. The WSA contains both active and stabilized sand dunes, 3 abandoned well sites, a shut-in gas well, and 2 trails within the WSA. Under All Wilderness, wilderness values would be preserved but oil and gas production would be foregone. Under No Wilderness, naturalness, solitude, and primitive and unconfined recreation would be lost and there would be some oil and

gas production. An adjacent producing oil and gas well increases the importance of maintaining the opportunity to explore for oil and gas in this area. Existing recreation uses of the WSA would not change under either alternative. These factors led to selection of the No Wilderness alternative as the Proposed Action.

Red Lake WSA (9,515 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-8. The Red Lake WSA is part of the Great Divide Basin-Red Desert area. There are sand dunes at various stages of stabilization which could provide information on dune movements and on how they are stabilized. The WSA contains several trails and a water well and accompanying trough. The topography is unbroken and provides little screening which limits opportunities for solitude. About 125 visitor-days are spent in the WSA annually for recreation other than hunting. The likelihood of oil and gas development in the WSA is relatively low. If it is proposed, permitting procedures which include an environmental analysis, would help locate access roads and well sites that would not affect dunes studied for scientific value. The dunes are interesting and valuable but do not contain unique ecosystem values present in other areas. These factors led to selection of the No Wilderness alternative as the Proposed Action.

Honeycomb Buttes WSA (41,188 acres)

Three alternatives are analyzed: designate 37,287 acres, All Wilderness, and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-9. The Honeycomb Buttes WSA is one of the best examples of colorful badland topography in Wyoming. It contains sagebrush hills and greasewood flats, eroding buttes with many and various colored bluffs, draws, and small canyons. Visibility is excellent, providing scenic vistas of the Wind River and Uinta Mountain ranges. Oil and gas production is unlikely in the near future due, in part, to the lack of a pipeline in the area. Under All Wilderness, wilderness values would be preserved in the WSA but oil and gas production would be foregone. Under No Wilderness, solitude and naturalness would be lost but the eroding bluffs would be preserved and there would be some oil and gas production. Under the Partial Designation alternative, wilderness values would be preserved on the 37,287 acres designated and oil and gas production would be foregone. Naturalness and solitude would be lost in the remainder of the area but there would be some

SUMMARY

oil and gas production. The uniqueness of the badland topography and the wilderness values that can be experienced by visitors to the area led to selection of Partial Designation (designate 37,287 acres) as the Proposed Action.

Oregon Buttes WSA (5,700 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-10. The Oregon Buttes were viewed by emigrants along the Oregon Trail as the halfway point on their journey from Independence, Missouri, to the Pacific Ocean. The WSA contains 3,335 acres of the 3,520-acre Oregon Buttes ACEC, designated to preserve the historical integrity of the area. Under All Wilderness, wilderness values and the historical integrity of the area would be preserved but oil and gas production would be foregone. Under No Wilderness, oil and gas leases would contain No Surface Occupancy stipulations in much of the ACEC; there would be seasonal stipulations and stipulations to restrict disturbance around raptor nests which would inhibit oil and gas production. These factors and the importance of preserving the historic integrity of the view of the Oregon Buttes led to selection of the All Wilderness alternative as the Proposed Action.

Whitehorse Creek WSA (4,002 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-11. The WSA includes 180 acres of the 3,520-acre Oregon Buttes ACEC. The WSA contains a variety of habitats and landscapes including small aspen and pine groves, high sandstone cliffs, and an area of badland topography. Mule deer, elk, and antelope use the WSA at various times of the year. The western part of the WSA has range improvements needed to maintain livestock distribution and numbers. Under All Wilderness, wilderness values would be preserved, oil and gas production would be foregone, and it would be more difficult to maintain range improvements. Under No Wilderness, little oil and gas activity would take place in the more rugged topography closer to the eastern part of the WSA, where most wilderness values would be preserved. Under No Wilderness,

maintenance of existing improvements be under fewer constraints, making it easier to raise livestock numbers to permitted use. These factors led to selection of the No Wilderness alternative as the Proposed Action.

Devils Playground-Twin Buttes WSA (23,841 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-12. The WSA contains varied topography and vegetation types from badlands to slopes well vegetated with relatively old (300-year old) junipers, an abundance of cultural resources (tipi rings and chipping sites), and fossils. The potential for oil and gas production is low. No oil and gas activity is anticipated in the WSA under either alternative. The numerous trails and seismic lines which affect naturalness are becoming less evident. Under All Wilderness, the existing trails would continue to heal and the area would regain its natural character within 10 years. No oil and gas production would be foregone. The nearby wilderness area may enhance recreation opportunities in the nearby Flaming Gorge National Recreation Area. Under No Wilderness, there would be no oil and gas production and naturalness and solitude would be lost due to increased use on the existing trails. These factors led to the selection of the All Wilderness alternative as the Proposed Action.

Red Creek Badlands WSA (8,020 acres)

Two alternatives are analyzed: All Wilderness and No Wilderness (No Action). The impacts of the alternatives are summarized in Table 2-13. The WSA contains 7,380 acres of the 59,532-acre Red Creek ACEC, designated to reduce erosion, sedimentation, and salinity contribution to the Colorado River system. The WSA contains an abandoned road to an old well site; crucial winter range for mule deer; and elk, antelope, and deer habitat. No oil and gas production is anticipated under either alternative. Under All Wilderness, projects to reduce natural erosion would be constrained. Under No Wilderness, it would be easier to implement structural erosion control measures. These factors led to selection of the No Wilderness alternative as the Proposed Action.

ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
APD	Application for a Permit to Drill (an oil or gas well)
AUM	Animal unit month
BBLS	Barrels (a measure of the quantity of condensate)
BCF	Billion cubic feet (a measure of quantity of natural gas)
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CSR	Channel stability rating
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act (of 1976)
FMU	Forest management unit
FR	Federal Register
KGS	Known geologic structure
HMP	Habitat management plan
IBLA	Interior Board of Land Appeals
MFP	Management Framework Plan (pre-FLPMA BLM land use plan)
mbf	Thousand board feet (a measure of timber volume)
mmbf	Million board feet (a measure of timber volume)
NEPA	National Environmental Policy Act (of 1969)
NHPA	National Historic Preservation Act
NRA	National Recreation Area
NRHP	National Register of Historic Places
NSO	No Surface Occupancy (a stipulation on an oil and gas lease)
NWPS	National Wilderness Preservation System
OHV	Off-highway vehicle
RMP	Resource Management Plan (BLM land use plan under FLPMA)
SHPO	State Historic Preservation Officer
USFWS	U.S. Fish and Wildlife Service
WGFD	Wyoming Game and Fish Department
WSA	Wilderness Study Area

PART 1

PURPOSE OF AND NEED FOR THE PROPOSED ACTION

PURPOSE AND NEED

The Secretary of the Interior recommends which public lands are suitable and which are nonsuitable for designation as wilderness. The President reviews the Secretary's recommendations and submits a recommendation to Congress. Wilderness designation requires Congressional action.

The purpose of the Proposed Action is to recommend certain public lands in the Rock Springs District, Wyoming, as suitable or nonsuitable for wilderness designation. The action is needed to comply with Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA), which requires an inventory and review of public lands under the jurisdiction of the Bureau of Land Management (BLM) for wilderness potential and a recommendation on their suitability for wilderness designation. The purpose of the EIS is to evaluate the potential impacts of the Proposed Action and the various alternatives for each of the 13 WSAs.

The Revised Draft Environmental Impact Statement (EIS) for 13 wilderness study areas (WSAs) was released in November 1988. The Final EIS supports wilderness suitability recommendations for the 13 WSAs which are summarized in Table S-1.

BACKGROUND

The Rock Springs District includes over 5.8 million acres of public land in southwestern Wyoming (Fremont, Lincoln, Sublette, Sweetwater, Teton, and Uinta counties). Seventeen areas, including the Scab Creek Instant Study Area and the Adobe Town WSA, were found to have sufficient wilderness characteristics to warrant further study. The Final EIS addresses the impacts of wilderness and nonwilderness management of 13 WSAs (Map D-1). The WSAs, or parts of WSAs, recommended for designation under the Proposed Action are shown on Map D-2.

In 1978, BLM inventoried public lands to identify areas with wilderness characteristics. The Scab Creek Primitive Area became an Instant Study Area. The 1981 EIS on the Scab Creek Instant Study Area recommended the 7,636-acre area as suitable for wilderness designation. A Final EIS for the Adobe Town

WSA (85,710 acres) was completed in December 1987, by BLM's Rawlins District (east of the Rock Springs District). The Proposed Action recommends 10,920 acres (4,480 acres in the Rock Springs District) as suitable for wilderness designation.

If Congress designates a WSA, BLM Manual 8550-1 (Interim Management Policy and Guidelines for Lands Under Wilderness Review) ceases to apply and BLM Manual 8560 (guidance for managing designated wilderness areas) will be used. If Congress decides a WSA will not be designated, BLM Manual 8550-1 ceases to apply and the area will be managed according to the appropriate land use plan. The recommendations in this EIS are plan amendments.

INTERRELATIONSHIPS

BLM Planning

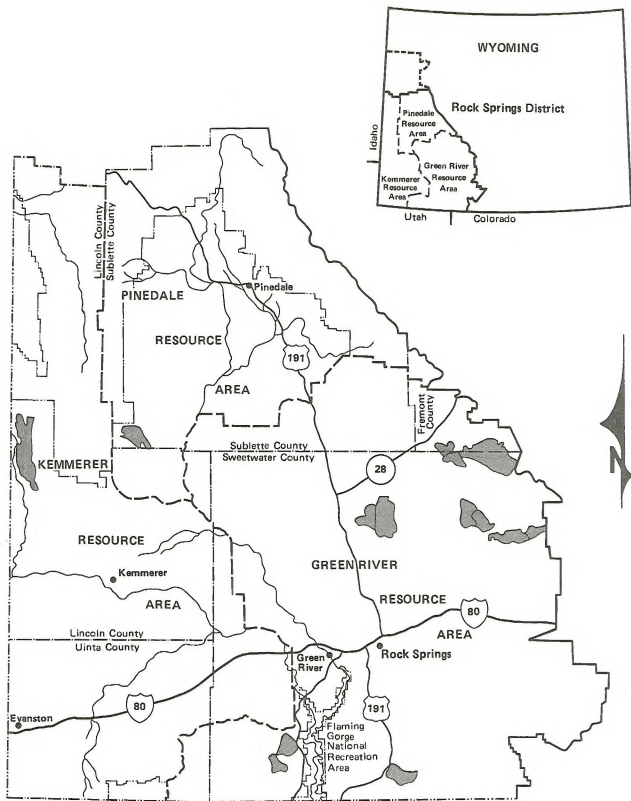
The Kemmerer Resource Area completed a resource management plan (RMP) in April 1986. The RMP addressed nonwilderness management of the Raymond Mountain WSA under the No Wilderness alternative for the Raymond Mountain WSA.

The RMP for the Pinedale Resource Area contains the most current multiple-use decisions. Those decisions are described under the Proposed Action (No Wilderness) for the Lake Mountain WSA.

The Big Sandy and Salt Wells Resource Areas (now the Green River Resource Area) are covered by management framework plans (MFPs). Nonwilderness management for each of the 11 WSAs in the Green River Resource Area is described under the No Wilderness alternative for each WSA.

Areas of Critical Environmental Concern (ACECs)

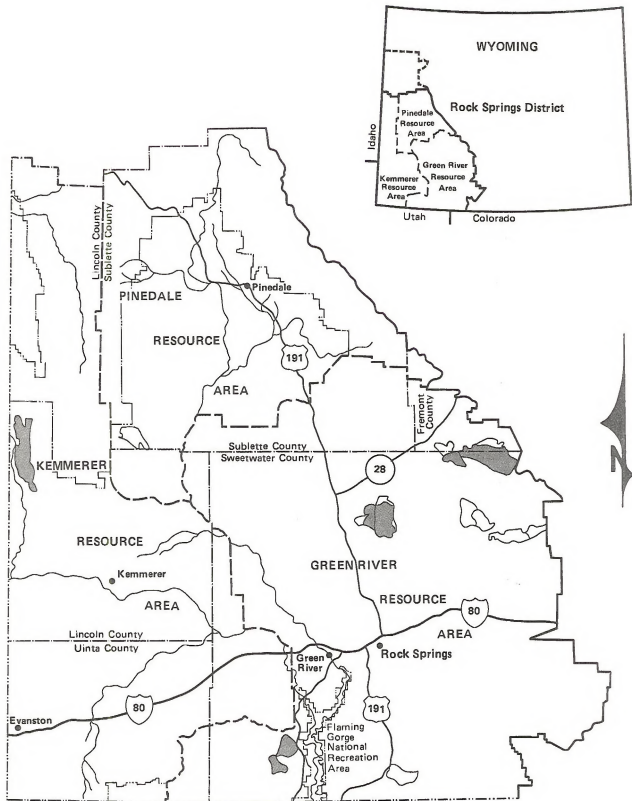
Five ACECs affect 7 WSAs in the Rock Springs District: Lake Mountain, Raymond Mountain, Sand Dunes, Buffalo Hump, Oregon Buttes, Whitehorse Creek, and Red Creek Badlands. Under nonwilderness, each WSA would be managed according to multiple-use decisions in the applicable MFP or RMP and the ACEC management plan (for the por-




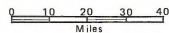
 Wilderness Study Areas



Map D-1
GENERAL LOCATION MAP
 Rock Springs District
 Wilderness Environmental Impact Statement



 Proposed Wilderness Areas



Map D-2
RECOMMENDED WILDERNESS
UNDER PROPOSED ACTION
 Rock Springs District
 Wilderness Environmental Impact Statement

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tion of the WSA in an ACEC). Management objectives for each ACEC are based on the values of the ACEC. The elimination of any of the 5 ACECs in WSAs was not considered because the ACECs continue to require special management attention.

Restrictions on Surface-Disturbing Activities

Restrictions are placed on surface-disturbing activities to protect other resource values. These restrictions are described in Appendix A. The restrictions that apply to a particular WSA are described in the site-specific analysis for the WSA in Part 2 of this EIS.

Interactions Among WSAs

Several WSAs are adjacent to other WSAs. The interrelated WSAs are the Buffalo Hump - Sand Dunes WSAs and the Honeycomb Buttes - Oregon Buttes - Whitehorse Creek WSAs. Parts of each of these complexes is proposed for designation.

Buffalo Hump - Sand Dunes WSAs.

A gravel railroad bed, from which the rails were removed, separates the WSAs. During the wilderness inventory, the railroad was in use and an area over 37,000 acres was identified as having sufficient wilderness characteristics. The area west of the railroad track is the Buffalo Hump WSA. The area east of the track is the Sand Dunes WSA. The railroad bed would be closed to motorized vehicles under the All Wilderness alternative for each WSA, the partial designation alternative for the Buffalo Hump WSA, and the larger partial designation alternative for the Sand Dunes WSA. These are alternatives where a wilderness boundary abuts the railroad bed. There is a 640-acre parcel of State land and a 240-acre parcel of private land between the 2 WSAs, along the railroad bed, which are not included within the boundary of either WSA.

Honeycomb Buttes - Oregon Buttes - Whitehorse Creek WSAs.

The inventory determined that over 51,000 acres of public land contained sufficient wilderness characteristics. A county road separates the 41,404-acre area of public land which became the Honeycomb Buttes WSA from the rest of the area. A 2-track trail separates the 5,700-acre area (Oregon Buttes WSA) from the 4,002-acre area (Whitehorse Creek WSA).

The 2-track trail bisects the Oregon Buttes ACEC (180 acres in the Whitehorse Creek WSA and 3,335 acres in the Oregon Buttes WSA). A 160-acre parcel of private land and a road leading to it from the east were cherrystemmed outside the boundary of the Honeycomb Buttes WSA. This road has limited use. Under the Proposed Action, the road is the northern boundary of the WSA.

Alkali Draw - South Pinnacles WSAs.

No interactions between wilderness or nonwilderness are anticipated. The impacts of wilderness or nonwilderness would be additive of those described under the site-specific analyses.

Alkali Basin East Sand Dunes - Red Lake WSAs.

No interactions between designation or nondesignation are anticipated. The impacts of designation or nondesignation would be additive of those described under the site-specific analyses.

National Park Service

The Killpecker Sand Dunes site (41,700 acres) includes parts of the Buffalo Hump and Sand Dunes WSAs. The Steamboat Mountain area (15,840 acres) is located between the Sand Dunes and Alkali Draw WSAs. The National Park Service considers the Sand Dunes ecosystem highly vulnerable, and believes that national natural landmark status would be highly desirable.

The Washlake Basin, which includes the Adobe Town WSA, covers 525 square miles. The Park Service feels only parts of it are of potential national natural landmark status and rates the vulnerability of the area as moderate to high due to potential mineral activity.

Forest Service

The Bridger-Teton National Forest is adjacent to the Raymond Mountain and Lake Mountain WSAs (Map D-1). Forest Service lands were studied for wilderness suitability during the Forest Service's RARE II process but were not recommended for wilderness.

The Flaming Gorge National Recreation Area (NRA), managed by the Ashley National Forest, is between the Red Creek Badlands and Devils Playground - Twin Buttes WSAs. Its outstanding recreation opportunities, including boating, waterskiing,

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fishing, camping, and picnicking, attract thousands of visitors annually. Designation of the Devils Playground - Twin Buttes WSA may benefit the recreation opportunities in the Flaming Gorge NRA.

Potential National Natural Landmarks

Five areas of potential National Natural Landmark status were identified in the Rock Springs District: Henry's Fork Fault Juniper Woodland, the Killpecker Sand Dunes (including Boars Tusk), the Ancient Lake Gosiute Sediments (also known as Green River Overlook), Steamboat Mountain, and the Washakie Basin.

SCOPING

Issues

The issues considered were identified during the scoping process and the comment periods on the Draft and Revised Draft EISs. The issues are presented in 3 separate sections based on the extent of analysis that was necessary to adequately address the impacts.

Issues Analyzed For Specific WSAs

Lake Mountain WSA

The issues in the Lake Mountain WSA are the potential production of natural gas, salable minerals, wilderness values, wildlife habitat (primarily elk and Colorado River cutthroat trout), grazing management, timber production, and recreation (primarily hunting and snowmobile use).

Raymond Mountain WSA

The issues in the Raymond Mountain WSA are oil and gas, wilderness values, wildlife habitat (including habitat for the Bonneville cutthroat trout), grazing management, timber production, and recreation (especially hunting and fishing).

Buffalo Hump WSA

The issues in the Buffalo Hump WSA are oil and gas, wilderness values, wildlife habitat, grazing management, and recreation.

Sand Dunes WSA

The issues in the Sand Dunes WSA are oil and gas, wilderness values, wildlife habitat, grazing management, and recreation (primarily off-highway vehicles).

Alkali Draw WSA

The issues in the Alkali Draw WSA are oil and gas, wilderness values, wildlife habitat, grazing management, and recreation.

South Pinnacles WSA

The issues in the South Pinnacles WSA are oil and gas, wilderness values, wildlife habitat, grazing management, and recreation.

Alkali Basin - East Sand Dunes WSA

The issues in the Alkali Basin - East Sand Dunes WSA are oil and gas, wilderness values, grazing management, wildlife habitat, and recreation.

Red Lake WSA

The issues in the Red Lake WSA are oil and gas, wilderness values, grazing management, wildlife habitat, and recreation.

Honeycomb Buttes WSA

The issues in the Honeycomb Buttes WSA are oil and gas, locatable minerals in the northern and western parts of the WSA, wilderness values, grazing management, wildlife habitat, and recreation.

Oregon Buttes WSA

The issues in the Oregon Buttes WSA are oil and gas, wilderness values, grazing management, wildlife habitat, and recreation.

Whitehorse Creek WSA

The issues in the Whitehorse Creek WSA are oil and gas, wilderness values, grazing management, wildlife habitat, and recreation.

Devils Playground - Twin Buttes WSA

The issues in the Devils Playground-Twin Buttes WSA are oil and gas, wilderness values, grazing management, wildlife habitat, recreation, and cultural resources.

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Red Creek Badlands WSA

The issues in the Red Creek Badlands WSA are oil and gas, wilderness values, grazing management, wildlife habitat, water quality (salinity in the Colorado River system), and recreation.

Issues Considered But Not Analyzed For Any WSA

General

Several concerns were determined not to be issues. These are: air quality, cultural and paleontological resources, social and economic resources, geology and topography, land use, threatened and endangered species (see Comment Letter #495 from the U.S. Fish and Wildlife Service - no jeopardy opinion), water rights, and wildlife populations. None of the WSAs contain alluvial valley floors, prime and unique agricultural lands, or existing or potential wild and scenic rivers.

Cultural and Paleontological

Cultural and paleontological resources were not analyzed in detail because, if surface-disturbing activity is proposed, the impacts to these resources would be analyzed site-specifically. Surveys would be conducted before authorizing any surface-disturbing activities. The results of these surveys would be used to modify proposals to avoid or minimize potential impacts. Cultural and paleontological resources in the WSAs are not considered unique. Therefore, the potential for inadvertent damage to these resources was not determined to be an issue to be addressed in this EIS. Cultural and paleontological resources are protected by the National Historic Preservation Act (NHPA) and the Archaeological Resource Protection Act (ARPA). Sections 106 and 110 of NHPA outline procedures for agency management of these resources.

Other activities (e.g., those which do not require a BLM permit, such as motorized vehicle use), may adversely affect cultural and paleontological resources if vehicles are used off existing roads and trails. Under nonwilderness, motorized vehicles would be limited to existing roads and trails. Pothunting, which may adversely affect cultural resources, would not be allowed either under designation or under nonwilderness. Because of the illegal nature of these activities, they were not considered to be factors important to a decision on wilderness suitability. No management actions would be implemented in most WSAs to make adverse impacts to cultural resources easier to occur. However, the site-specific analysis for the Devils Playground - Twin Buttes WSA indicates that the

closure of many of the trails in the WSA under All Wilderness (Proposed Action) would reduce adverse impacts to potentially important cultural resources. While existing laws and regulations mitigate potential impacts to cultural resources, they do not eliminate the potential impacts.

Threatened and Endangered Species

The U.S. Fish and Wildlife Service, in a December 28, 1989, opinion, said they concluded that "a wilderness/no wilderness designation for the 13 WSAs is not likely to adversely affect the endangered bald eagle (*Haliaeetus leucocephalus*), peregrine falcon (*Falco peregrinus*), whooping crane (*Grus americana*), black-footed ferret (*Mustela nigripes*), Colorado squawfish (*Ptychocheilus lucius*), or humpback chub (*Gila cypha*)." They added that "wilderness/no wilderness designation would not involve water depletions from the Green River System" which is an important concern because of potential impacts to downstream fish (e.g., Colorado squawfish and humpback chub). No other threatened or endangered species would be affected in any of the WSAs.

Habitat of threatened or endangered species would be preserved and protected under wilderness designation. When an area is not designated, BLM's permitting process for surface-disturbing activities would prevent adverse impacts to threatened and endangered species. Clearances of prairie dog towns (potential habitat for black-footed ferrets) would be conducted when surface disturbance is proposed. Although some WSAs contain mining claims, activities associated with locatable minerals are not expected in any of the WSAs. Therefore, no adverse impacts to threatened and endangered species are expected. The last paragraph under Wildlife in the Affected Environment section of each site-specific analysis discusses the potential occurrence of threatened and endangered species in each WSA.

Social and Economic Resources

Social and economic resources were not determined to be an issue. Oil and gas drilling would take place near a WSA even if it could not take place in the WSA. About 2 percent of the public land in the Rock Springs District is recommended for wilderness designation. Approximately 5.7 million acres of public land would be available for oil and gas leasing. If State and private lands available for oil and gas leasing are added to the 5.7 million acres of public land available for lease, the 124,833 acres withdrawn if the Proposed Action is selected would have little effect on oil and gas exploration and production in southwestern Wyoming. Due to the availability of land leased for oil and gas surrounding WSAs, industry would not be prevented from exploring or

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developing resources in the region. They would move their efforts to areas around the WSAs. This would result in little or no change in the availability of jobs or oil and gas revenues to the State and counties.

Erosion and Sedimentation

The analysis assumed that if oil and gas activity does not take place within a WSA, it would take place in the vicinity of the WSA. If a WSA is not leased, it is likely that a similar level of oil and gas exploration or development would occur nearby. This would result in a similar amount of surface disturbance and increased erosion. Mitigation measures are designed to minimize erosion and sedimentation. The WSA where this factor is most important is in the Red Creek Badlands WSA where unstable soils make erosion and sedimentation a concern. However, the likelihood of oil and gas activity in this WSA is low.

Timber management could affect erosion and sedimentation in the Lake Mountain and Raymond Mountain WSAs but not in other WSAs. Other WSAs do not have timber resources that could be harvested. Off-highway vehicles would have the greatest potential to affect erosion and sedimentation in the Sand Dunes and Buffalo Hump WSAs. Off-highway vehicle use in other WSAs is relatively low, and any difference between wilderness and no wilderness alternatives would be minimal.

Predator Control

Predator control would continue to be necessary, especially where grazing use is for sheep, but the nonimpairment criteria would apply. Control of predators using motorized vehicles would generally not be allowed. Control would have to be on foot or on horseback. This issue is broader than the Rock Springs District. Predator control in designated wilderness areas will be treated according to Bureau policy for managing wilderness areas.

Noxious Weed Control

Noxious weed control would generally be implemented where infestations could affect private lands or cause other undesirable resource problems. To meet nonimpairment criteria, control may be limited to methods on foot, on horseback, or by other methods that would not impair wilderness values. This issue is also broader than the Rock Springs District and, as with predator control, will be treated according to Bureau policy.

Water Rights

Concerns were raised regarding how water rights would be affected by wilderness designation or non-designation. This concern resulted, in part, from the uncertainty of whether water rights for wilderness were reserved when Congress created the National Wilderness Preservation System. On July 26, 1988, the Attorney General concurred with the Department of the Interior Solicitor's opinion that Congress did not intend to reserve Federal water rights for wilderness purposes when it created the National Wilderness Preservation System. The issue is not an environmental issue that is appropriate for analysis in this EIS. It is essentially a legal matter, separate from the environmental review process. For these reasons, the issue was dropped from further analysis.

Wildlife Populations

The effects on wildlife populations were considered for all WSAs. Wildlife populations are dependent on habitat, which was analyzed for each WSA. Based on this analysis, it was determined that wildlife populations would not be affected by designation or nondesignation. If a WSA is not designated wilderness and activities which affect wildlife would be authorized, the wildlife would be displaced to adjacent areas for the duration of the activity. Therefore, while populations in the WSA may be affected, the population in the herd area (which is considerably larger than the WSA) would not be affected. If a WSA is designated wilderness, existing populations would not change as a result of designation.

Issues Considered But Not Analyzed For Specific WSAs

The issues considered but not analyzed for any of the WSAs are described in the previous section. This section describes the issues which were considered for all WSAs but were eliminated from detailed analysis for specific WSAs.

Lake Mountain

The issues considered but not analyzed for the Lake Mountain WSA are locatable minerals and water quality. There are no known locatable minerals in the WSA and no activity is anticipated. No surface occupancy (NSO) restrictions placed on surface-disturbing activities, especially in the Rock Creek drainage, along with an off-highway vehicle

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closure, would prevent water quality degradation in the WSA. Therefore, water quality was not analyzed in detail. Detailed descriptions of restrictions placed on surface-disturbing activities are found in Appendix A. The restrictions that apply to the Lake Mountain WSA are described in the site-specific analysis for the Lake Mountain WSA.

Raymond Mountain

The issues considered but not analyzed for the Raymond Mountain WSA are locatable and salable minerals. There are no known locatable minerals that would be economically minable under current or projected conditions. Therefore, no activity related to locatable minerals is anticipated. Restrictions placed on surface-disturbing activities, especially in the Raymond Mountain ACEC, along with an off-highway vehicle closure, would prevent water quality degradation in the WSA. Therefore, water quality was not analyzed in detail.

Four water rights, permitted by the State Engineer, lie wholly or partially within the WSA. These water rights are associated primarily with irrigation water. Wilderness designation would reduce the potential for water resource development. However, no such developments are planned or projected. Therefore, water rights would not be affected.

Buffalo Hump

The issues considered but not analyzed for the Buffalo Hump WSA are locatable and salable minerals, timber production, and water quality. There are no known locatable minerals in the WSA. Sand is available within the WSA. However, existing sources are ample to meet current and anticipated future demands. There are no timber resources. No actions under either designation or nondesignation would affect existing water resources in the WSA. The ponds in the WSA are discussed under wildlife habitat. These ponds are fed by precipitation falling in the WSA. They do not have outlets which would affect downstream uses.

Sand Dunes

The issues considered but not analyzed for the Sand Dunes WSA are locatable and salable minerals, timber production, and water quality. There are no known locatable minerals in the WSA. Sand is available within the WSA. However, existing sources are ample to meet current and anticipated future demands. There are no timber resources. No actions under either designation or nondesignation would affect existing water resources in the WSA. The ponds in the WSA are discussed under wildlife hab-

itat. These ponds are fed by precipitation falling in the WSA. They do not have outlets which would affect downstream uses.

Alkali Draw

The issues considered but not analyzed for the Alkali Draw WSA are locatable and salable minerals, timber production, and water quality. There are no known locatable or salable minerals in the WSA. There are no timber resources. The only water resources associated with this WSA occur as overland flow resulting from precipitation events. They would not be affected by designation. Under nondesignation, stipulations and conditions of approval on surface-disturbing activities (Appendix A) would prevent increased erosion and sedimentation.

South Pinnacles

The issues considered but not analyzed for the South Pinnacles WSA are locatable and salable minerals, timber production, and water quality. No locatable or salable minerals are known to exist in the WSA. There are no timber resources. The only water resources associated with the WSA occur as overland flow resulting from precipitation events. They would not be affected by designation. Under nondesignation, stipulations and conditions of approval on surface-disturbing activities (Appendix A) would prevent increased erosion and sedimentation.

Alkali Basin - East Sand Dunes

The issues considered but not analyzed for the Alkali Basin - East Sand Dunes WSA are locatable and salable minerals, timber production, and water quality. There are no known locatable minerals in the WSA. Sand is available within the WSA. However, existing sources are ample to meet current and anticipated future demands. There are no timber resources. The only water resources associated with this WSA occur as overland flow resulting from precipitation events. They would not be affected by designation. Under nondesignation, stipulations and conditions of approval on surface-disturbing activities (Appendix A) would prevent increased erosion and sedimentation.

Red Lake

The issues considered but not analyzed for the Red Lake WSA are locatable and salable minerals, timber production, and water quality. There are no known locatable minerals in the WSA. Sand is available within the WSA. However, existing sources are ample to meet current and anticipated future

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demands. There are no timber resources in the WSA. The only water resources associated with this WSA occur as overland flow resulting from precipitation events. They would not be affected by designation. Under nondesignation, stipulations and conditions of approval on surface-disturbing activities (Appendix A) would prevent increased erosion and sedimentation.

Honeycomb Buttes

The issues considered but not analyzed for the Honeycomb Buttes WSA are leasable minerals other than oil and gas, salable minerals, timber production, and water quality. Although coal, oil shale, and uranium may be present, their development potential is low and there are better sources nearby. Therefore, no activity related to these minerals is anticipated. No activity related to salable minerals is anticipated. There are no timber resources. Water resources would not be affected by designation. Under nondesignation, stipulations and conditions of approval on surface-disturbing activities (Appendix A) would prevent increased erosion and sedimentation.

Oregon Buttes

The issues considered but not analyzed for the Oregon Buttes WSA are leasable minerals other than oil and gas, locatable and salable minerals, timber production, and water quality. Although coal, oil shale, and uranium may be present, their development potential is low and there are better sources nearby. Therefore, no activity related to these minerals is anticipated. No activity related to salable minerals is anticipated in the WSA. Although some trees are found in the WSA, they are found in small pockets and are not of commercial value. Water resources would not be affected by designation. Under nondesignation, stipulations and conditions of approval on surface-disturbing activities (Appendix A) would prevent increased erosion and sedimentation.

Whitehorse Creek

The issues considered but not analyzed for the Whitehorse Creek WSA are leasable minerals other than oil and gas, locatable and salable minerals, timber production, and water quality. Although coal, oil shale, and uranium may be present in the WSA, their development potential is low and there are better sources nearby. Therefore, no activity related to these minerals is anticipated. No activity related to salable minerals is anticipated in the WSA. Although some trees are found in the WSA, they are

found in small pockets and are not of commercial value. Water resources would not be affected by designation. Under nondesignation, stipulations and conditions of approval on surface-disturbing activities (Appendix A) would prevent increased erosion and sedimentation.

Devils Playground - Twin Buttes

The issues considered but not analyzed for the Devils Playground - Twin Buttes WSA are leasable minerals other than oil and gas, locatable and salable minerals, timber production, and water quality. Although coal, oil shale, and uranium may be present in the WSA, their development potential is low and there are better sources nearby. Therefore, no activity related to these minerals is anticipated. The development potential for iron is moderate; however, due to the thinner, deeper beds of mixed sodium and halite (salt), and the much more economic deposits in the western part of Sweetwater County, development is unlikely in the foreseeable future. No activity related to salable minerals is anticipated in the WSA. There are no timber resources. Water resources would not be affected by designation. Under nonwilderness management, no oil and gas activity is anticipated; however, stipulations on oil and gas leases would prevent increased erosion and sedimentation. No water depletions of the Green River system would occur as a result of nondesignation.

Red Creek Badlands

The issues considered but not analyzed for the Red Creek Badlands WSA are leasable minerals other than oil and gas, locatable and salable minerals, and timber production. Although coal, phosphate, uranium, and clinoptilolites may be present, their development potential is low and there are better sources nearby. Therefore, no activity related to these minerals is anticipated. Development potential for iron is moderate; however, due to the thinner, deeper beds of mixed sodium and halite (salt), and the existence of much more economic deposits in the western part of Sweetwater County, development is unlikely in the foreseeable future. No activity related to salable minerals is anticipated. There are sand and gravel reserves in the WSA; however, development potential is low because the reserves are found on mesa tops with steep surrounding topography making the reserves relatively inaccessible. There are no timber resources. Water resources would not be affected. Under nonwilderness management, stipulations on oil and gas leases would prevent increased erosion and sedimentation. No water depletions of the Green River system would occur as a result of nonwilderness management.

PURPOSE AND NEED

Alternatives

A series of alternatives was considered for each WSA, ranging from designating more land than the WSA as wilderness to designating none of the WSA as wilderness. In an effort to minimize conflicts, additional alternatives were developed. All reasonable alternatives were considered for each WSA.

Alternatives Analyzed In Detail

Lake Mountain WSA

Two alternatives were analyzed: No Wilderness (Proposed Action) - 0 acres designated; and All Wilderness - 13,865 acres designated.

Raymond Mountain WSA

Two alternatives were analyzed: All Wilderness (Proposed Action) - 32,936 acres designated; and No Wilderness - 0 acres designated.

Buffalo Hump WSA

Three alternatives were analyzed: Partial Designation (Proposed Action) - 6,080 acres designated; All Wilderness - 10,300 acres designated; and No Wilderness - 0 acres designated.

Sand Dunes WSA

Four alternatives were analyzed: Large Partial Designation (Proposed Action) - 21,304 acres designated; All Wilderness - 27,109 acres designated; No Wilderness - 0 acres designated; and Small Partial Designation - 16,280 acres designated.

Alkali Draw WSA

Two alternatives were analyzed: No Wilderness (Proposed Action) - 0 acres designated; and All Wilderness - 16,990 acres designated.

South Pinnacles WSA

Two alternatives were analyzed: No Wilderness (Proposed Action) - 0 acres designated; and All Wilderness - 10,800 acres designated.

Alkali Basin East Sand Dunes WSA

Two alternatives were analyzed: No Wilderness (Proposed Action) - 0 acres designated; and All Wilderness - 12,800 acres designated.

Red Lake WSA

Two alternatives were analyzed: No Wilderness (Proposed Action) - 0 acres designated; and All Wilderness - 9,515 acres designated.

Honeycomb Buttes WSA

Three alternatives were analyzed: Partial Designation (Proposed Action) - 37,287 acres designated; All Wilderness - 41,620 acres designated; and No Wilderness - 0 acres designated.

Oregon Buttes WSA

Two alternatives were analyzed: All Wilderness (Proposed Action) - 5,700 acres designated; and No Wilderness - 0 acres designated.

Whitehorse Creek WSA

Two alternatives were analyzed: No Wilderness (Proposed Action) - 0 acres designated; and All Wilderness - 4,002 acres designated.

Devils Playground - Twin Buttes WSA

Two alternatives were analyzed: All Wilderness (Proposed Action) - 23,841 acres designated; and No Wilderness - 0 acres designated. No other alternatives were analyzed. Although 2 partial wilderness alternatives were considered (designation of either the Devils Playground or the Twin Buttes parts of the WSA), they were not analyzed because no mineral or other development-related activity is anticipated in either area. Therefore, nondesignation of part of the WSA would benefit minerals or other development.

Red Creek Badlands WSA

Two alternatives were analyzed: No Wilderness (Proposed Action) - 0 acres designated; and All Wilderness - 8,020 acres designated.

Alternatives Considered But Not Analyzed In Detail

Lake Mountain WSA

A partial designation alternative for the Lake Mountain WSA, which included the 4,200 acres of the Rock Creek ACEC in the WSA, was considered. It was not analyzed because the part of the ACEC in the WSA has very steep slopes, lacks existing roads, and is near streams. These factors would make it dif-

PURPOSE AND NEED

ficult to engage in surface-disturbing activities in the area, especially given the restrictive management in the ACEC. There would be little difference in impacts between a such a partial wilderness alternative and No Wilderness.

Raymond Mountain WSA

A partial designation alternative was considered for the Raymond Mountain WSA. This alternative would result in 13,530 acres currently designated as the Raymond Mountain ACEC being wilderness. The remainder of the WSA would not be designated. Oil and gas leases would contain stipulations which would result in precluding surface occupancy within the ACEC, except for 70 acres (on top of the drainage). Timber harvesting would occur on 75 acres (also on top of the drainage) within the ACEC, affecting solitude during the time operations take place and visual resources for several years. However, because of the small acreage involved, and the relatively inconspicuous location (from within the ACEC) the overall effects would be minor. Other surface-disturbing activities would be precluded in the ACEC, including closures to off-road vehicles. Designating only the ACEC would result in environmental impacts only slightly different than those under nonwilderness. Therefore, partial designation was not analyzed in detail in the EIS.

Buffalo Hump WSA

All reasonable alternatives were considered for the Buffalo Hump WSA.

Sand Dunes WSA

All reasonable alternatives were considered for the Sand Dunes WSA.

Alkali Draw WSA

A partial designation alternative was considered but not analyzed because of the topography of the area, human influences, and scattered nature of the pre-FLPMA leases. No part of the WSA is uniquely different from the rest. A partial designation alternative would not protect wilderness values because of the 2,700 acres of pre-FLPMA leases in the WSA.

South Pinnacles WSA

A partial designation alternative was not analyzed for the South Pinnacles WSA because of topography and human influences. There is little topographic relief in the WSA. No part of the WSA contains wilderness values different from those of the WSA as

a whole. Nor does any part of the WSA pose management concerns not present in the rest of the WSA. No particular concerns would be eliminated by a partial wilderness alternative.

Alkali Basin - East Sand Dunes WSA

A partial designation alternative was not analyzed for the Alkali Basin - East Sand Dunes WSA because of the size and narrow configuration of the area. No portion of the WSA contains any wilderness values different than those of the WSA as a whole. Nor does any part of the WSA pose management concerns not present in the rest of the WSA. There is nothing unique in any particular portion of the WSA that would make it beneficial to manage a portion of the area as wilderness. Therefore, a partial designation alternative was not developed.

Red Lake WSA

A partial designation alternative was not analyzed for the Red Lake WSA because of its size and topography. No portion of the WSA contains wilderness values different than those of the WSA as a whole. Nor does any portion of the WSA pose management concerns not present in the rest of the WSA. Therefore, a partial designation alternative was not developed.

Honeycomb Buttes WSA

All reasonable alternatives were considered for the Honeycomb Buttes WSA.

Oregon Buttes WSA

A partial designation alternative was not analyzed for the Oregon Buttes WSA because of the steep topography and small size of the area (5,700 acres). The Oregon Buttes ACEC was considered as a partial designation but its small size (3,335 acres in the Oregon Buttes WSA and 180 acres in the Whitehorse Creek WSA) and the importance of preserving the historic vista for viewing the Oregon Buttes made it unreasonable. A 2-track trail separates 180 acres of the ACEC in the Whitehorse Creek WSA from the larger part of the ACEC in the Oregon Buttes WSA.

Whitehorse Creek WSA

The Whitehorse Creek WSA was reduced to under 5,000 acres after the intensive inventory. It was retained for further study because it is adjacent to the Oregon Buttes WSA, separated by a 2-track trail. The WSA contains a variety of habitat types (aspen and pine groves; high, sheer sandstone cliffs; and an

PURPOSE AND NEED

area of badland topography). Over 2 miles of the northern boundary and about 1 mile of the eastern boundary of the WSA are adjacent to private lands. These factors, combined with the small size of the Whitehorse Creek WSA, do not provide an opportunity to identify a partial designation alternative.

Devils Playground - Twin Buttes WSA

A partial designation alternative was not analyzed for the Devils Playground - Twin Buttes WSA. The WSA contains numerous 2-track trails that receive apparent recent use in both the Devils Playground and the Twin Buttes portions of the WSA. The badland topography and the steep sloped cedar-covered canyons provide a diversity to the WSA that adds to the value of the WSA. Because no activities are anticipated under either the All Wilderness (Proposed Action) or No Wilderness alternative, no benefit or difference in impacts would occur if only one of the 2 parts of the WSA was designated.

Red Creek Badlands WSA

A partial designation alternative was not analyzed for the Red Creek Badlands WSA because no part of WSA contains wilderness values different from those of the rest of the WSA. Nor does any part of the WSA pose management concerns not present in the rest of the WSA. Virtually all of the WSA (8,500 acres) is within the much larger Red Creek ACEC (59,532 acres). A partial designation alternative, combined with ACEC management on the nonwilderness portion, would result in impacts similar to designating the entire WSA.

CHANGES SINCE THE REVISED DRAFT EIS

The Final EIS was changed with regard to acquisition of State and private land within designated wilderness areas. It points out where State and private land (either inholdings or parcels on the boundary of WSAs) has wilderness values similar to those on public land. The site-specific analyses say these lands would be added to the wilderness area in the event they are acquired. In some cases, private land is cherrystemmed outside of a WSA boundary.

Estimates of the number of oil and gas wells in each WSA were changed to reflect what is "reasonably foreseeable." (The Revised Draft EIS assumed that 1 well would be drilled per 640 acres in most WSAs.) This reduced the number of wells in most WSAs. The number of wells was also refined

to estimate the number of exploration wells that resulted in dry holes and the number of producing wells.

The success rates for exploratory oil and gas wells were used to determine the number of wells that may have to be drilled before a discovery is made. For example, in a WSA with an estimated success rate of 20 percent, 5 exploration wells would result in 1 producer. Once a well is a producer, it was assumed that an 8- to 12-well field would follow. The 20 percent success rate would not apply to the 8- to 12-well field development. They were all assumed to be producers.

The recommendation for the Devils Playground - Twin Buttes WSA was changed from nonwilderness to wilderness because recent monitoring showed that many existing trails are less evident. Over the past 10 years, use of the WSA (with motorized vehicles) has declined. These factors resulted in a WSA that is more natural in character than when the 1983 Draft EIS was prepared. The potential for oil and gas production is low. Therefore, oil and gas production would not be foregone if the area is designated. The reasons for not designating the WSA did not appear to warrant a nonwilderness recommendation.

ASSUMPTIONS AND ANALYSIS GUIDELINES

BLM will not acquire or retire pre-FLPMA oil and gas leases in wilderness areas. The Lake Mountain, Sand Dunes, and Alkali Draw WSAs contain pre-FLPMA oil and gas leases. Production from pre-FLPMA leases would be from within a WSA, rather than by directional drilling from outside the WSA. Oil and gas activity on pre-FLPMA leases in wilderness areas would not stop until after oil and gas are recovered.

Under wilderness, development on post-FLPMA leases would be constrained by such requirements as offsite drilling which would preserve wilderness values.

Average disturbance per oil and gas well, including access road, was assumed to be 7 acres unless otherwise described. Average disturbance per producing well was assumed to be 5 acres, after 2 acres not needed for production are reclaimed.

In most cases, production figures were based on the average figure for the Green River Basin (i.e., from 640 acres, 3.5 billion cubic feet (BCF) of natural gas and 4,957 barrels (BBLs) of condensate would be recovered). The economic value is based on \$1.30 per thousand cubic feet of gas and \$19 per barrel of oil.

PURPOSE AND NEED

Construction, drilling, and other similar activities would result in a greater degree of displacement of big game than producing wells. Therefore, short-term impacts are greater than long-term impacts. Elk are most adversely affected (with a potential to be displaced up to 1 mile from human activity), followed by mule deer. Pronghorn antelope are least affected by human activity.

The number of miles of existing trails in each WSA was estimated from recent maps. In some WSAs, there are additional trails that are usable for motorized vehicles but are not included in the analysis. If a WSA is designated, these trails would approximate their natural condition in the long term.

Stipulations would be placed on oil and gas leases to protect other resources. New leases would be issued with the "Wyoming BLM Standard Mitigation Guidelines for Surface-Disturbing Activities" (Appendix A). If resource values are sufficiently important, a No Surface Occupancy restriction may be placed on leases. This is the most stringent restriction and would be used when other mitigation is not sufficient to protect important resource values. A waiver or exception of this stipulation must be accompanied by either an EA or an EIS, and must not be inconsistent with the planning decision which imposed the restriction. If a waiver is inconsistent with the planning decision, a plan amendment would be needed. Stipulations restrict surface disturbance:

- On slopes in excess of 25 percent
- Within important scenic areas
- Within 500 feet of surface water and/or riparian areas
- Within ¼ mile of perennial streams (Raymond Mountain ACEC)
- Within ¼ mile or the visual horizon of historic trails
- Construction using frozen materials or when soil is saturated
- During crucial times for wildlife (in winter range, calving areas)
- To protect nesting habitat of raptors and sage and sharp-tailed grouse during the nesting period
- To protect sage/sharp-tailed grouse breeding grounds, and/or other species' important activities
- To protect threatened or endangered species
- To protect cultural resources
- To protect important resource values not covered by other stipulations.

Detailed descriptions of the restrictions placed on surface-disturbing activities are found in Appendix A. The restrictions which apply to each WSA are found in the site-specific analysis for that WSA in Part 2 of this EIS.



PART 2

ACTIONS BY WSA

INTRODUCTION

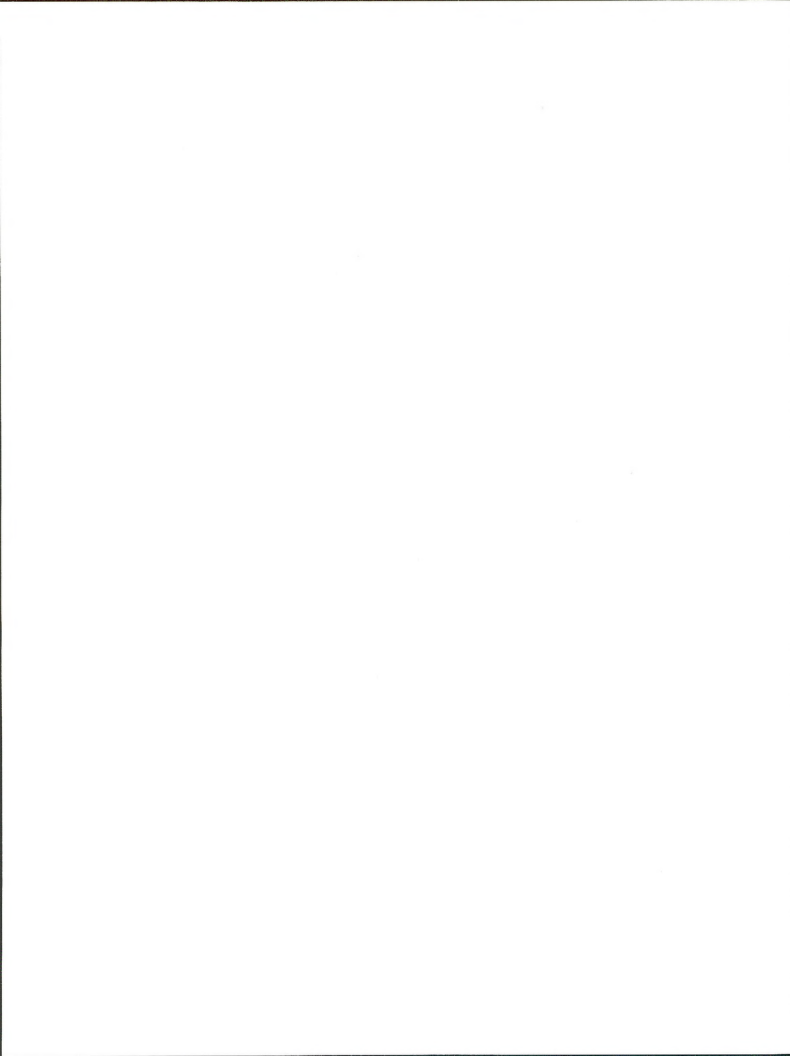
Alternatives were developed for each wilderness study area (WSA). As a result of the analysis, a Proposed Action for each WSA was developed. Table S-1 summarizes the acreage recommended as suitable and unsuitable for designation as wilderness under each alternative analyzed in detail. As a result of comments on the Revised Draft EIS, some changes were incorporated into the site-specific analyses for all the WSAs.

A total of 127,148 acres in 6 WSAs is recommended as suitable for wilderness designation (Map D-2). There are 32,936 acres in the Raymond Mountain WSA; 6,080 acres in the Buffalo Hump WSA; 21,304 acres in the Sand Dunes WSA; 37,287 acres in the Honeycomb Buttes WSA; 5,700 acres in the Oregon Buttes WSA; and 23,841 acres in the Devils Playground - Twin Buttes WSA recommended as

suitable for designation as wilderness. Wilderness designation is not recommended on 90,134 acres of the WSAs in the Rock Springs District: 4,220 acres in the Buffalo Hump WSA, 5,805 acres in the Sand Dunes WSA; 4,117 acres in the Honeycomb Buttes WSA; and all public land in the other 7 WSAs.

Two areas were previously recommended as suitable for wilderness designation: 7,636 acres in the Scab Creek Instant Study Area, and 4,480 acres of the Adobe Town WSA (in the Rock Springs District). A total of 139,264 acres in 8 WSAs recommended for wilderness designation in the Rock Springs District.

Areas designated by Congress as wilderness would be managed under the provisions of the Wilderness Act of 1964, BLM Manual 8560, and applicable regulations. These provisions would enhance and protect each area's wilderness values by prohibiting or limiting uses that conflict with wilderness management; valid existing rights would be assured and, where applicable.



LAKE MOUNTAIN WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Lake Mountain WSA (Map LM-1) is one of 2 WSAs in the Wyoming Range portion of the Overthrust Belt. The WSA contains irregular steep-sided ridges, ranging in elevation from 7,400 feet to over 9,600 feet. There are 4 main drainages in the WSA. The WSA includes 4,200 acres of the Rock Creek Area of Critical Environmental Concern (ACEC). Rock Creek contains a population of Colorado River cutthroat trout designated "rare" by the Wyoming Game and Fish Department (WGFD) and "sensitive" by BLM. The WSA is important elk winter range for one of the last naturally wintering elk herds in the upper Green River Basin.

Since the Final Inventory Report (USDI 1981a), 105 acres of split estate (Federal surface, State minerals) were removed from the boundary of the east-central portion of the WSA (section 16, T. 27 N., R. 114 W.) because of manageability problems. The acreage analyzed as inside the WSA in the Revised Draft EIS and this Final EIS is 13,865 acres. A 40-acre parcel of private land and a road leading to it are cherrystemmed outside of the WSA (Map LM-2).

Proposed Action and Alternatives

Two alternatives were analyzed: 1) none of the 13,865-acre WSA would be wilderness (Proposed Action - No Wilderness - No Action); and 2) all of the 13,865-acre Lake Mountain WSA would be wilderness (All Wilderness).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

No Wilderness (Proposed Action - No Action)

The Proposed Action is to designate none of the 13,865-acre Lake Mountain WSA. Oil and gas leasing would resume. Motorized vehicles would be limited to existing roads and trails in most of the WSA.

There would be a seasonal closure to motorized vehicles to protect elk crucial winter range in an area which includes the entire WSA. The 4,200 acres of the Rock Creek ACEC would be closed to motorized vehicles.

Mineral Resources

Oil and Gas Exploration and Development

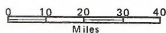
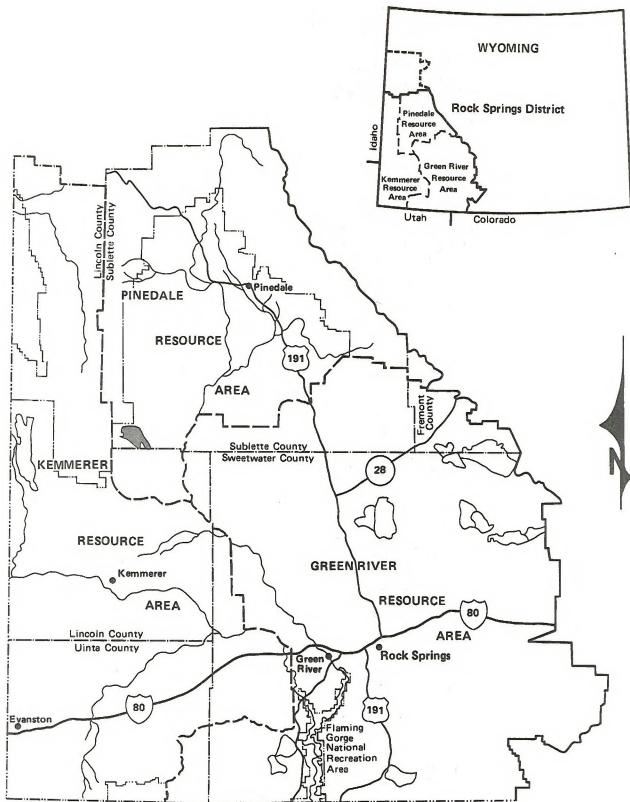
Oil and gas activity on pre-FLPMA leases held by production, which occupy 600 acres in the WSA, would continue. It would be subject to surface protection restrictions to protect other resources in the entire WSA (e.g., seasonal stipulations, slope restrictions, restrictions on surface disturbance near live water, requirements to maintain cover for big game, reclamation). The gas produced would be "sour" gas containing toxic hydrogen sulfide. Gas would be transported through the Riley Ridge gas field (to the north) to the Shute Creek gas processing plant in Lincoln and Sweetwater counties, Wyoming. Approximately 2,000 BCF of gas would be produced from the WSA.

The probability of production from oil and gas wells in the WSA is very high, especially on the east side of the WSA, which is within the productive Riley Ridge gas field. Therefore, any well drilled is likely to go into production. The likelihood of a well being a producer on the west side of the WSA is somewhat lower.

Oil and gas leasing in 4,200 acres of the Rock Creek ACEC would resume with a No Surface Occupancy (NSO) stipulation. After a study on elk crucial winter range is completed, oil and gas leases on crucial winter range would be issued with seasonal stipulations, restricting activities during the winter. Oil and gas leases in the area not found to be crucial elk winter range (potentially the entire area) would be issued with less restrictive stipulations (e.g., no construction on steep slopes, on unstable soils, or within 500 feet of live water).

It is projected that 10 wells would be drilled in the WSA (seven of which are likely to be producing wells), resulting in approximately 94.5 acres of surface disturbance from well pads, production facilities, and access roads. There would be 3 wells on the east side of the WSA, all producers. There would be a projected 7 wells on the west side of the WSA, 4 of which would be producers. After portions of producing well facilities and dry holes are reclaimed, there would be 49 acres occupied by oil and gas facilities in the WSA.

The estimate assumes that surface disturbance would be allowed outside of the Rock Creek ACEC,



Map LM-1
LAKE MOUNTAIN WSA
 Rock Springs District
 Wilderness Environmental Impact Statement

LAKE MOUNTAIN WSA

consistent with the objective of protecting the elk winter range and with other restrictions on the leases. Wells drilled into the Madison Formation in the vicinity of the WSA drain upwards of 1,400 acres.

When necessary to protect wintering elk, oil and gas operators would be required to use snowcats to access wells rather than accessing the wells by 4-wheel-drive vehicles on plowed roads. These decisions would be made by the BLM authorized officer.

Solid Mineral Exploration and Development

The common use area for moss rock would remain open in Long Hollow (195 acres in the WSA, all of which is subject to disturbance), in the southwestern part of the WSA. The area contains approximately 8,000 tons of available material. Use of this area would not be allowed during crucial winter periods for big game.

Mineral extraction for salables would not be allowed in the Rock Creek ACEC. No activity related to leasable minerals, other than oil and gas, is anticipated. The area would remain open to locatable minerals but, because there are no known locatable minerals in the WSA, no activity is anticipated.

Off-Highway Vehicle Use (OHV)

The Rock Creek drainage (approximately 4,200 acres of the 5,264-acre Rock Creek ACEC) is closed to motorized vehicles. Recreational motor vehicle use in the remaining 9,665 acres of the WSA would be limited to existing roads and trails. There are 5 miles of roads and trails scattered around the WSA. About 10 miles of new roads may be constructed to develop the gas resources, for a total of 15 miles of roads and trails in the WSA. There would be approximately 700 visitor-days of OHV recreation use.

A seasonal OHV closure (approximately 13,000 acres), including over-the-snow vehicles, to protect elk crucial winter range (November 15 to April 30) would continue to be implemented. The area is closed during normal and severe winters, and open during mild winters.

Recreation Use

There would be approximately 100 to 200 visitor-days of snowmobiling annually. Hunting would be allowed but hunters would not be allowed to use motorized vehicles in the Rock Creek drainage or off existing roads and trails in the rest of the WSA. Hunting use of the WSA is about 725 hunter-days. About 300 hunter-days are spent by hunters who pack in using horses. The remainder are spent by hunters using vehicles. Rock Creek would continue to be closed to fishing by the WGFS.

There are 2 undeveloped campsites along the LaBarge Creek boundary of the WSA. They are used as hunting camps in the fall and by anglers during the summer. No recreation facilities are planned in the WSA.

Grazing Use

Grazing management practices (Fox-Yose and Upper North LaBarge grazing allotments) would not change from those currently in place. The Fox-Yose allotment is currently in the "M" or maintain management category. The Upper North LaBarge allotment is currently in the "I" or improve management category. Within the Lake Mountain WSA, the estimated carrying capacity of 1,210 AUMs for cattle would continue from May 15 to September 30. There would be up to 10 trips annually (2 per month during the grazing season) using motorized vehicles in connection with grazing operations.

The Upper North LaBarge allotment encompasses 18,805 acres, of which a total of 9,785 acres are in the WSA (52 percent). The allotment is in the "I" category on the basis of steep terrain and many acres of unusable livestock forage, conflicts with crucial winter range, possible adverse impacts on Colorado River cutthroat trout, and unreliable water sources. There are 4 existing livestock enclosures along Rock Creek within the Rock Creek ACEC. Outside the ACEC, the use of motorized vehicles in connection with range management activities would be allowed, but would generally be limited to existing roads and trails.

Wildlife Habitat Management

Approximately 4,200 acres of the 5,264-acre Rock Creek ACEC are in the Lake Mountain WSA. The ACEC would continue to be managed to protect the habitat of the Colorado River cutthroat trout (nominated as a candidate for listing as a Federal threatened and endangered species). The ACEC management plan provides guidance that excludes surface-disturbing activities in the Rock Creek drainage. The ACEC would continue to be closed to motorized vehicles. This would help to protect the aquatic habitat for the Colorado River cutthroat trout. The seasonal closure to motorized vehicles in crucial winter range would be enforced during normal and severe winters when elk use the crucial winter range, displacing 100 to 200 recreation visitor-days. This would help reduce the disturbance to wintering elk caused by snowmobiles.

Special management attention would be focused on the winter range for the last naturally-wintering population of elk. The objective of resource management in the crucial winter range (13,000 acres in the WSA) would be to maintain the habitat and popula-

LAKE MOUNTAIN WSA

tions of elk at least at current levels. Various types of use authorizations would be conditioned with seasonal restrictions to protect elk habitat on crucial winter range. The maintenance of cover ratios in connection with oil and gas and forestry activities would be an important concern. Prescribed burning of sagebrush/grass vegetation would be used to help improve elk winter range on approximately 200 acres in the eastern portion of the WSA. The burning would be designed to simulate a natural burn.

Existing stream enclosures would be maintained, although some relocation of fences may be necessary to reduce annual maintenance costs. Maintenance would be accomplished without the use of motorized vehicles.

Forestry Management

Based on the Pinedale Resource Management Plan (RMP), approximately 2/3 of the forested acreage in the Lake Mountain WSA would be managed for production of forest products with strong emphasis on maintaining wildlife cover levels. The remaining third (the Rock Creek drainage) would be excluded from all forest management activities. Activity would not be allowed in the Rock Creek drainage.

Forestry operations would be conducted to maintain cover ratios for elk and would take place in a single year. Human presence due to forestry operations would affect elk in that year. Elk would begin to move back into the area after the logging operations stop.

Actions in the part of the WSA available for forest management activities would include timber harvesting, utilization of other forest products (Christmas trees, firewood, etc.), tree thinning, and reforestation. Harvest levels have not been allocated to the WSA; however, the Pinedale RMP allocates a harvest level of approximately 953 acres during the next 20 years from the Deadline - Pinegrove forest management unit (FMU), of which the Lake Mountain WSA is a part (approximately 25 percent). The Deadline - Pinegrove FMU contains 15,448 acres of conifer and 3,520 acres of woodland (mostly aspen). Forest management activities in the Deadline - Pinegrove FMU would be subject to surface management restrictions to protect other resources. Approximately 85 acres would be harvested in scattered blocks over a 20-year period, producing approximately 900,000 board feet of timber, along with some firewood and Christmas trees. There would be an additional 5 acres of surface disturbance for access roads.

All Wilderness (13,865 acres designated)

All 13,865 acres of public land in the Lake Mountain WSA would be designated as wilderness. There would be no oil and gas leasing in the WSA. A producing well, associated with a pre-FLPMA lease in the Graphite Unit of the Riley Ridge gas field, would continue to produce approximately 45 BCF of gas from WSA acreage. Motorized vehicles would be prohibited except in connection with valid existing rights (e.g., pre-FLPMA oil and gas leases). A 40-acre parcel of private land and a road are chertemmed from the WSA boundary. They would be added to the wilderness area, if acquired.

Mineral Resources

Oil and Gas Exploration and Development

Unleased lands (13,265 acres) would not be offered for lease. Oil and gas activity on pre-FLPMA leases, which occupy 600 acres, would be allowed subject to applicable surface protection stipulations (e.g., seasonal stipulations, reclamation, etc.) to protect other resources. No additional wells would be needed to develop pre-FLPMA leased acreage. This is in the Graphite Unit of the Riley Ridge gas field. The sour gas produced is transported to the Shute Creek gas processing plant (Lincoln County, Wyoming). There would be no new surface disturbance associated with new gas wells. When necessary to protect wintering elk, oil and gas operators would be required to use snowcats to access wells rather than accessing the wells by 4-wheel-drive vehicles on plowed roads.

Approximately 45 BCF of gas would be produced from existing leases and 2,000 BCF of gas would be foregone because no new leases would be issued.

Solid Mineral Exploration and Development

The 195 acres of common use area for moss rock within the WSA would be closed (54 percent of the 360-acre common use area).

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be prohibited in the WSA. Motor vehicle use would generally not be allowed for maintenance of range improvements.

LAKE MOUNTAIN WSA

Recreation Use

The WSA would be managed to provide primitive, nonmotorized recreation. Vehicle-dependent recreation use would not be allowed; approximately 100 to 200 visitor-days annually would be displaced. Hunting would be allowed, but hunters would not be permitted to use motorized vehicles. No facilities associated with recreation would be constructed.

Grazing Use

Grazing management practices (Fox-Yose and Upper North LaBarge grazing allotments) would not change from those currently in place except that motorized vehicles would not be allowed in conjunction with grazing operations. The Fox-Yose allotment is currently in the "M" or maintain management category. The Upper North LaBarge allotment is currently in the "I" or improve management category. Within the Lake Mountain WSA, the estimated carrying capacity of 1,210 AUMs for cattle would continue from May 15 to September 30. Range management would be the same as described under the Proposed Action; only 1 spring development would be implemented at the head of Rock Creek. This spring development would involve less than 1 acre, in the ACEC, and would be maintained without using motorized vehicles.

Wildlife Habitat Management

Approximately 4,200 acres of the 5,264-acre Rock Creek ACEC are in the Lake Mountain WSA. The ACEC would continue to be managed to protect the habitat of the Colorado River cutthroat trout. The ACEC management plan provides guidance that excludes surface-disturbing activities in the Rock Creek drainage. The ACEC would continue to be closed to motorized vehicles. This would help to protect the aquatic habitat and help to ensure the Colorado River cutthroat trout does not become endangered.

Surface-disturbing activities, except those related to production from the existing gas well in the southeast portion of the WSA, would be excluded. Therefore, the crucial winter range for elk would be maintained.

As described in the Proposed Action, prescribed burning of sagebrush/grass vegetation would be used to help improve elk winter range on approximately 200 acres in the eastern portion of the WSA. The burning would be designed to simulate a natural burn.

As under the Proposed Action, existing stream exclosures would be maintained, although some rel-

ocation of fences may be necessary to reduce annual maintenance costs. Maintenance would be accomplished without the use of motorized vehicles.

Forestry Management

No forest management activities would be allowed.

CHAPTER II - Affected Environment

Introduction

The dominant uses of the Lake Mountain WSA are wildlife, hunting, oil and gas, and livestock grazing. Some horseback riding, fishing, photography, and sightseeing occur in the WSA. Approximately 4,200 acres of the WSA are in the 5,264-acre Rock Creek Area of Critical Environmental Concern (ACEC) and will continue to be managed in accordance with the ACEC management plan, except where wilderness management is more restrictive. A major element of the ACEC management plan is management of the Rock Creek watershed to protect the Colorado River cutthroat trout. The ACEC management plan also includes provisions to protect elk crucial winter range.

Wilderness Values

The 13,865-acre Lake Mountain WSA meets the criteria in Section 2(c) of the Wilderness Act of 1964. A road (2.25 miles) penetrates the northern boundary and terminates at a 40-acre parcel of private land on Lake Mountain. The road and private land are excluded or "cherrystemmed" from the WSA (Map LM-2).

Naturalness

Despite the presence of several human intrusions, the WSA appears to retain an essentially natural character. Five 2-track trails, a short road, and a buck-and-pole enclosure fence along a section of Rock Creek are the major intrusions. Terrain and vegetation screening lessen the impact of existing intrusions to the point where they are not noticeable until one is almost upon them. From most vantage points within the WSA, the landscape appears entirely natural and unaffected by human activity.

LAKE MOUNTAIN WSA

Solitude

The mountainous terrain, with moderate to dense forest cover (over 25 percent of the WSA), provides many opportunities to avoid the sights and sounds of other users. There are numerous secluded places throughout the WSA where a person could experience outstanding opportunities for solitude.

Primitive and Unconfined Recreation

The presence of steep mountain slopes, deep canyons, forested areas, and meadow-like openings supply a diversity of recreation opportunities. Activities for which outstanding opportunities exist include hiking, horseback riding, hunting, wildlife observation, ski touring, and nature photography.

The area available for travel is much larger than acreage figures indicate, due to the steep mountainous terrain. However, for some activities, movement would be restricted by these steep slopes, while for others, they would provide a challenge. The fact that only 1 perennial stream, Rock Creek, is found within the WSA may serve to localize user movement along this drainage.

Current use of the WSA (300 to 400 visitor-days) for solitude or primitive and unconfined recreation is somewhat limited, although portions of the area provide that opportunity. The main primitive type of recreation is hunting on foot or by horseback. A secondary benefit of this activity is the opportunity to experience solitude. The Rock Creek drainage provides good opportunities for primitive recreation and solitude.

Special Features

Wildlife is the principal supplemental value of the WSA. Species include moose, elk, mule deer, black bear, and grouse. Rock Creek is one of 2 streams in the Upper Green River drainage which contain a genetically pure strain Colorado River cutthroat trout. The WSA is important elk winter range for one of the last naturally wintering elk herds in the area. In other areas along the Wyoming Range, elk winter habitat is supplemented at feedgrounds.

Mineral Resources

Three Federal oil and gas units (Graphite, Fogarty Creek, and Dry Piney) lie adjacent to the Lake Mountain WSA. Portions of the Graphite Unit actually lie

within the WSA boundary. Production in these units is from several formations including the Frontier, Bear River, Nugget, and Madison. Exxon is producing gas (carbon dioxide and methane) from the Madison as part of their LaBarge Project (part of the Riley Ridge Natural Gas Project). The potential for gas reserves in the WSA is high.

Approximately 26 percent of the WSA (3,600 acres) is leased for oil and gas, both pre-FLPMA (600 acres) and post-FLPMA leases (3,000 acres). There is 1 producing well in the southern portion of the WSA, producing from pre-FLPMA leased acreage both within and outside the WSA. Production from WSA acreage is estimated at 45 BCF. Estimates of recoverable reserves in the WSA are based on the total production from this well. The Riley Ridge gas field (Madison Formation), of which the WSA is a part, contains upwards of 20 trillion cubic feet of gas.

A small area along the southeast side of the WSA is underlain by Tertiary age rocks which may be coal bearing, but the total tonnage would be very small and no interest has been expressed. No other formations at the surface are coal bearing. Subsurface coal-bearing rocks may occur at a depth of 3,000 to 4,000 feet. The development potential for coal in the Lake Mountain WSA is low.

The Phosphoria outcrop is the surface exposure of former blanket-type sediments deposited in a Permian sea and subsequently deeply covered by sediments and lithified. Later uplift, folding, faulting, and erosion of the rocks created the present outcrop pattern. Most of the WSA is within Phosphate Reserve 4 established by Executive Order on July 21, 1910. Neither the WSA nor areas in the vicinity are leased. There is no known industry interest in the phosphate rock.

Abandoned copper prospects occur in the N $\frac{1}{2}$ of section 21, T. 27 N., R. 115 W. The prospects consist of shallow (1- to 2-foot) bulldozed trenches. In 1941, copper claims were staked in the N $\frac{1}{2}$ of section 22, T. 27 N., R. 115 W., by Ivan M. Lewis, et al. These claims were relinquished in 1963. Copper staining in the Nugget Sandstone occurs within the Wyoming Thrust Belt (Love and Antweiler 1973). No exploration work for copper is known to be taking place around the WSA.

Part of the WSA was designated as a common use area (195 acres) for the removal of moss rock (public land in sections 15 and 22 of T. 27 N., R. 115 W.). The sandstone's fracture, color, and hardness make it an excellent dimension stone, useful for decorative and building purposes. The pink salmon laminated sandstone tends to break along bedding planes, leaving blocks 2 to 4 inches thick with a flat base and top. Lichens grow on its surfaces, accounting for its popularity. Business and government buildings, churches, and homes in Sublette, Lincoln, and

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Teton counties use the stone for exterior and structure purposes. Although there are many outcrops of Nugget sandstone in this part of Wyoming, the common use area is an easily accessible location in the Pinedale Resource Area where lichen growth covers the sandstone surface. The total common use area covers 360 acres.

Wildlife

The Lake Mountain WSA provides excellent habitat for a large variety of wildlife. The WSA contains 4,200 acres of the 5,264-acre Rock Creek ACEC. The WSA constitutes 5 percent of the Hunt Area 94 for elk, 3 percent of Hunt Area 143 for deer, and 5 percent of Hunt Area 25 for moose.

Valuable big game habitat (elk crucial winter range) is located in the WSA. This winter habitat is utilized by elk during severe weather conditions when they are forced from higher elevations because of snow depth. During mild winters, elk spread over much of the area designated as winter/yearlong habitat. A few elk stay on BLM-administered lands during the summer, but the majority move to higher country on the Bridger-Teton National Forest.

Investigations conducted by the WGFD on elk response to mineral development demonstrate the importance of the Rock Creek - Graphite Hollow area. Winter range near gas well drilling operations is abandoned during periods of intense human activity. The Pinedale RMP identifies the Graphite Hollow elk winter range as high priority elk habitat.

Part of the WSA is in the LaBarge deer crucial winter range. Most of the WSA is winter/yearlong habitat and is utilized during mild winters and during the spring-fall period. Higher elevations are used primarily as deer summer range. Fawning takes place in the aspen-conifer complexes during the spring. Exact fawning locations are dictated by climatic conditions and vary with availability of snow-free sites and spring green-up.

Most of the WSA is moose summer range. During severe winters, moose move down to the willow bottoms and adjacent timbered slopes of LaBarge Creek. The willow bottom and aspen-fir complexes of Rock Creek are preferred sites.

A few black bear are present in the WSA. A young bear was sighted in Rock Creek in June 1979 and again in the fall of 1980. Several sightings were reported on Deadline Ridge, on the eastern bound-

ary of the WSA. Lynx were observed in the past; however, there are no data on population densities. The pika, a small member of the rabbit family, is fairly abundant. They occur on the talus slopes of Rock Creek, Long Hollow Creek, and LaBarge Creek proper.

The Lake Mountain WSA provides habitat for numerous game (sage grouse, blue grouse, and ruffed grouse) and nongame birds. Waterfowl use is limited to the beaver pond complexes in the Rock Creek drainage.

Aquatic habitat in the WSA is limited to 2 small streams: Long Hollow Creek and Rock Creek. The portion of Long Hollow Creek on public lands is not a fishery nor is it considered a potential fishery, due to lack of sufficient water, poor stream bed composition, and insufficient shading of the stream.

Rock Creek supports a viable population of pure strain Colorado River cutthroat trout. The Colorado River cutthroat trout was nominated as a candidate for listing as a Federal threatened and endangered species. The WGFD prepared a draft plan to increase populations and maintain or enhance habitat for this species. Further population declines could result in formal listing of this species.

Under the East Front Aquatic Habitat Management Plan, measures were taken to perpetuate the Colorado River cutthroat trout and its habitat in Rock Creek. In 1976, a fish barrier was built by the WGFD on lower Rock Creek to prevent hybridization of this pure strain population with fish moving up from LaBarge Creek. Later that year, 2.5 miles of fence were built by BLM to form enclosures that protect 1 mile of critical stream habitat from excessive livestock use. Further habitat protection was provided by the Rock Creek ACEC management plan, including restrictions on timber harvest and mineral leasing.

Recreational fishing proved to be reducing the base population of Colorado River cutthroat trout in Rock Creek below acceptable levels. Studies by the WGFD prompted State regulations which closed Rock Creek to fishing in 1981. This closure will remain in effect until conditions warrant reopening the stream to fishing.

There are no prairie dog towns documented in the Lake Mountain WSA. There is no winter range for bald eagles. There is potential habitat for peregrine falcons but none have been observed in the WSA. There is no suitable habitat for the whooping crane. There has been no occurrence of the Colorado squawfish or the humpback chub.

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Recreation Opportunities

There are 2 undeveloped recreation sites in the Lake Mountain WSA. These sites are along the LaBarge Creek Road and consist of rock fire rings and other evidence of short-term camping use. Most of the use is from weekend anglers during the summer, and hunter camps in the fall. Total recreation use in the WSA is approximately 1,000 visitor-days annually.

Hunting season is the highest use period (725 hunter-days annually). Elk, mule deer, and moose hunting are considered excellent, and bear hunting is considered good. During the hunting season, October 1 through November 15, numerous hunting camps are established on and around Lake Mountain, mainly along LaBarge Creek, Long Hollow, and Deadline Ridge. Because of the lack of roads and trails, horses are frequently needed to "pack out" large game animals from within the WSA. Recreation use for nonmotorized activities is approximately 100 visitor-days annually.

There are an estimated 100 to 200 visitor-days annually by snowmobile enthusiasts in the WSA. This occurs in years when the area remains open to motorized vehicles during mild winters, but when snow cover is sufficient for snowmobile use.

Livestock Grazing

Livestock and wildlife depend on natural stream water in the WSA. Graphite Hollow, Spring Branch Creek, Conway Creek, and Rock Creek are the primary water sources. One reservoir on the northern end of Lake Mountain is the only successfully developed water source in the WSA. The Rock Creek rain-trap, on the southern end of Lake Mountain, was collapsed by a snow drift shortly after installation and is currently scheduled for abandonment and removal.

Water shortages in most of the WSA result in areas of heavy utilization around the reliable water sources. Graphite Hollow, Spring Branch, and Conway creeks are actively eroding near their confluence. Water developments in unwatered portions of the Upper North LaBarge allotment would accommodate a grazing management system that would relieve much of the pressure from these areas. Within the Lake Mountain WSA, the estimated carrying capacity of 1,210 AUMs for cattle would continue from May 15 to September 30.

The Lake Mountain WSA is in the Fox-Yose and Upper North LaBarge grazing allotments. The Fox-Yose allotment is in the "M" or maintain management category. The Upper North LaBarge allotment is in the "I" or improve management category.

The Upper North LaBarge allotment encompasses 18,805 acres, of which a total of 9,785 acres are in the WSA (52 percent). The allotment is in the "I" category. There are 4 existing livestock enclosures along Rock Creek within the Rock Creek ACEC.

Water Resources

Water in the WSA is predominantly used for wildlife, livestock, and recreation. Consumptive use figures are not available. Instream flow needs for fisheries, recreation, and channel maintenance have not been calculated. Downstream water use of the WSA drainages is primarily for irrigation.

Four drainages are found within the WSA. Rock Creek is the major perennial stream; Long Hollow, Spring Branch, and Conway creeks are smaller, spring-fed, and, at times, intermittent streams. All of these flow into LaBarge Creek which feeds the Green River.

Flooding along perennial streams occurs in association with natural high runoff events. Sediment damage is somewhat mitigated by the presence of several beaver dams on Rock Creek which, during normal runoff years, prevent excessive siltation in the drainage.

Soil erosion in Graphite Hollow (Spring Branch and Conway creeks) appears active, as evidenced by the presence of gullying and damage to the existing road. This situation is difficult to control due to the natural instability of the soil.

There are 2.25 miles of Rock Creek on public land with channel stability ratings (CSR) which are used to measure stability. Normal ratings range from 38 (excellent) to 144 (poor). In 1975, the average CSR in these 2.25 miles was 92.1 (fair to high channel stability). Sixty-two percent (1.4 miles) of the stream miles with CSRs were in an apparent declining trend. In 1976, one mile of stream was fenced to protect aquatic habitat. Since then, channel stability in the protected area has improved.

Forestry Resources

The Lake Mountain WSA is in the Deadline-Pinegrove forest management unit (FMU). The WSA contains approximately 4,725 forest acres or roughly 25 percent of the total forest acreage in the FMU and 10 percent of the forest base for the Pine-dale Resource Area. Tree species include lodgepole pine (723 acres), Douglas fir (688 acres), Engelmann spruce/subalpine fir (2,031 acres), and aspen (1,283 acres). Collectively, the conifer species (pine, fir, and spruce) cover 3,442 acres.

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Based on existing inventory, the conifer has a standing volume of 33.2 million board feet (mmbf), including 1.3 mmbf of harvestable conifer volume within the aspen acreage. Volumes were not computed for aspen because no local market or demand exists. The Bridger-Teton National Forest, which is in the vicinity of the Lake Mountain WSA, produces approximately 20 mmbf of wood products annually.

Annual net production from conifer acreage in the WSA is approximately 485 thousand board feet (mbf) which includes an annual mortality rate of 179 mbf. Since the date Lake Mountain was designated a WSA, no timber harvesting has been planned. However, the WSA forms a portion of the Deadline-Pinegrove FMU which has a proposed 20-year harvest level of 953 acres.

Approximately 50 percent of the forest acreage in the WSA occurs on slopes of 45 percent or greater with rocky, moderately shallow soils. The remaining 50 percent of the forest acreage in the WSA grows on slopes less than 45 percent with considerably less exposed rock and moderately deep soils. Forest conditions vary from young, healthy, relatively insect-and disease-free stands to those that are quite old with high levels of insect and disease activity and high mortality rates.

As indicated by the net annual production of 485 mbf, many forest stands in the WSA are in sound growing condition. However, as indicated by the 179 mbf annual mortality rate, most stands are starting to exhibit signs of reduced tree vigor, as well as increased susceptibility to insect and disease

attacks. The primary insects and diseases affecting the forest resource include bark beetles, dwarf mistletoe, and several varieties of rust.

Access to forested areas is extremely limited. The only access within the WSA is a narrow 2-track with steep grades. The 2-track provides access to a parcel of private land on Lake Mountain. Two additional roads (LaBarge Creek and Deadline Ridge) form portions of the north and south boundaries of the WSA and would also provide some access to individual timber stands.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of the environmental consequences for the No Wilderness and All Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-1 summarizes the impacts by alternatives.

TABLE 2-1
SUMMARY OF IMPACTS LAKE MOUNTAIN WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Public Lands Designated	0 acres	13,865 acres
Other Lands	A 40-acre parcel of private land and road leading to it are cherrystemmed from the WSA.	A 40-acre parcel of private land and road leading to it are cherrystemmed from the WSA.
Wilderness Values Naturalness	Naturalness retained on approximately 7,000 acres of the WSA.	Naturalness retained in the entire WSA.
Solitude	Solitude retained on approximately 7,000 acres of the WSA.	Solitude retained in the entire WSA.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation retained on approximately 7,000 acres of the WSA.	Opportunities for primitive and unconfined recreation retained in the entire WSA.

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TABLE 2-1 (Continued)

SUMMARY OF IMPACTS LAKE MOUNTAIN WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Special Features	Special features, including the ACEC and habitat for the Colorado River cutthroat trout, retained in the entire WSA.	Special features, including the ACEC and habitat for the Colorado River cutthroat trout, retained in the entire WSA.
Minerals		
Oil and Gas	Oil and gas leasing on 4,200 acres in the ACEC, with an NSO stipulation.	No oil and gas leasing in 4,200 acres of the Rock Creek ACEC in the WSA.
	Oil and gas leasing on 9,665 acres; stipulations to protect crucial elk winter range.	No oil and gas leasing in the WSA outside the ACEC.
	No drainage of gas resources under the WSA because leasing would resume.	Drainage of gas resources under the WSA by adjacent production.
	Nearly all of the WSA's 2,000 BCF of gas (\$2.6 billion) produced.	136 BCF of gas (\$177 million) produced. 2,000 BCF (\$2.6 million) of gas foregone.
Wells in Area Not Designated	9	0
Surface Disturbance in Area Not Designated	94.5 acres	0 acres
Solid Minerals	Common use area for moss rock (195 acres) in Long Hollow open.	54 percent (195 acres) of common use area for moss rock in Log Hollow closed.
Wildlife Habitat and Populations	Big game habitat and numbers would not be affected because the objective for the area is to protect elk crucial winter range. Water quality problems would continue at natural levels because of limitations on activity in the Rock Creek ACEC. Habitat for the Colorado River cutthroat trout maintained.	Big game numbers would remain about the same or increase slightly. Disturbance to wildlife would be reduced. Water quality problems (channel stability and sedimentation) would continue at natural levels. Habitat for the Colorado River cutthroat trout maintained.

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TABLE 2-1 (Continued)
SUMMARY OF IMPACTS LAKE MOUNTAIN WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Recreation Opportunities	Access for hunting would increase but there would be added oil and gas activity. Hunter-days (725 annually) would not change.	Hunter use would be reduced by 400 hunter-days annually to 325 hunter-days.
	Recreation associated with motorized vehicle use would be reduced.	Vehicle-dependent recreation reduced, but overall recreation opportunities would be maintained.
	100-200 visitor-days using snowmobiles would be maintained one of every three years.	100-200 visitor-days using snowmobiles would be lost one of every three years.
Livestock Grazing	Water availability and livestock distribution problems could be resolved by new range improvements.	Water availability and livestock distribution problems would continue. One spring development would be installed without using motorized vehicles.
	Range improvements would not be constrained by having to meet nonimpairment criteria.	Costs of additional improvements would be increased because of constraints imposed by nonimpairment criteria.
	Livestock operators would use motorized vehicles.	Occasional inconvenience to livestock operators because of motorized vehicle use restrictions.
Timber Production	The WSA, excluding the Rock Creek drainage, would be available for timber harvesting.	There would be no timber harvesting activities.
	85 acres harvested over 20 years, yielding 900,000 board feet of timber.	900,000 board feet of timber would be foregone over 20 years.

Proposed Action and Alternatives

No Wilderness (Proposed Action - No Action)

The Proposed Action is to designate none of the 13,865-acre Lake Mountain WSA as wilderness. Oil and gas leasing would resume with stipulations to protect other resources. Approximately 4,200 acres of the WSA would be managed according to the ACEC management plan.

Impacts to Wilderness Values

Naturalness

There would be a loss in naturalness outside of the Rock Creek ACEC because oil and gas operations would be allowed. The existing well site on associated with pre-FLPMA acreage would continue to affect naturalness on about 20 acres because it is relatively well screened by trees.

Approximately 49 acres would be occupied by new well sites, roads, and other facilities, resulting in a loss in naturalness. Three producing wells in the eastern portion of the WSA (21 acres of well sites and facilities) would be in areas where there are fewer trees. They would affect naturalness on about 180 to 200 acres of the WSA.

The 4 producing wells in the western portion of the WSA (42 acres of well sites and facilities) would affect naturalness on about 100 acres. These wells would have a lesser effect because they would be easier to screen from view because they could be placed on ridgetop screened by trees where they would be more difficult for a visitor to the WSA to see.

The effects of forestry activities would adversely affect naturalness because of the removal of 85 acres of timber over 20 years. As regeneration of the forest resource takes place, naturalness would return. Forestry activities would affect solitude only while the activities are occurring.

The prescribed burning would be designed to approximate a natural burn and would not affect naturalness. The burn would be irregular and would be indistinguishable from one caused by lightning. Overall, this activity would not affect wilderness values.

The collection of moss rock in the common use area would adversely affect naturalness on 195 acres

in one isolated canyon along the southern boundary of the WSA. It would not affect naturalness in any of the rest of the WSA.

Solitude

There would be a loss in solitude outside the Rock Creek ACEC because oil and gas operations would be allowed. Approximately 94.5 acres would be disturbed by roads and other facilities, resulting in a loss in solitude. Because little exploration and production is anticipated in the western part of the WSA, and these disturbances would not be allowed in the ACEC, these losses would be apparent in about half of the WSA. During the winter, both construction and drilling activities would be reduced, resulting in a seasonal return of solitude. Activities allowed outside of the ACEC could be heard within the ACEC, resulting in reduced opportunities for solitude.

The closure to motorized vehicles in the ACEC and the limited designation in the rest of the WSA would help to preserve solitude. However, the level of satisfaction associated with recreation in a primitive and unconfined setting would be diminished due to activities allowed outside the ACEC.

Implementation of the Proposed Action would maintain some of the wilderness character of the WSA. Within the Rock Creek ACEC (4,200 acres of which is in the WSA), essentially all the wilderness characteristics would remain intact because oil and gas activities, motorized vehicles, and forest management activities would be excluded.

Collection of moss rock (on 195 acres) and forestry activities (on 85 acres) would also adversely affect solitude for short periods over the next 20 years.

Primitive and Unconfined Recreation

Recreation activities which benefit from a pristine environment would be lost while timbering activities are ongoing and while oil and gas construction and drilling are taking place. After these periods for both activities, the effects on solitude in the ACEC would be minimal. Prescribed burning would result in a temporary loss in opportunities for primitive and unconfined recreation.

Special Features

The special features in the ACEC would be protected with No Surface Occupancy stipulations on 4,200 acres. The Rock Creek drainage would also not be subject to timber harvesting. Wildlife, including the naturally wintering elk herd and Colorado River cutthroat trout, would not be adversely

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affected because oil and gas leases would include stipulations to protect both winter range and the Rock Creek drainage. These stipulations would limit the lease rights and allow the BLM to deny operations that are not in conformance with the stipulations, if appropriate. Elk would be protected from disturbance by snowmobiles during normal and severe winters by the elimination of snowmobile.

Conclusion

Naturalness, solitude, and opportunities for primitive and unconfined recreation would be retained in about half of the WSA (approximately 7,000 acres). Special features of the WSA would be preserved.

Impacts to Oil and Gas Exploration and Production

The entire area would be available for leasing with appropriate stipulations. Under the Proposed Action, 9 wells would be drilled and up to 2,000 BCF of gas would be recovered from the WSA. This total includes approximately 45 BCF produced from WSA acreage by the existing well in the WSA.

The oil and gas activity within the WSA would provide a continuing level of employment in the industrial sector similar to the current situation, primarily associated with production activities. The Riley Ridge field, of which the WSA is a part, is a highly automated field but it provides long-term local employment to keep the wells operational and to run the dehydration plant, well field manifolds, and pipelines.

Conclusion

An estimated 2,000 BCF of gas (\$2.6 billion) would be produced from the WSA. This accounts for about 4 percent of the reserves in the Green River Basin (50,000 BCF).

Impacts to Wildlife Habitat

There are no actions proposed which would reduce habitat for deer, moose, bear, raptors, and small game. Therefore, the habitat would be maintained within the 4,200 acres of the Rock Creek ACEC.

Off-highway vehicle (OHV) restrictions would reduce impacts to wildlife on the remainder of the area. The winter closure for the elk crucial winter range would result in no disturbance of elk during critical winter periods and no displacement would

occur during this period. The elk in this area are the last naturally wintering population of elk in this part of Wyoming; the prevention of disturbance during this period is very important.

There would be 9 wells drilled resulting in 49 acres occupied by producing wells and facilities, an insignificant portion of the approximately 275,000-acre herd area. These disturbances would occur within the WSA but outside the ACEC. The human activity associated with drilling would cause elk to avoid the areas while drilling occurs. Within 5 years, elk numbers would return to approximately 75 to 80 percent of pre-drilling levels. Elk numbers would return to pre-drilling levels after about 10 years, assuming levels of activity associated with production currently associated with the Riley Ridge field.

Activities in the common use area for moss rock would not be allowed during crucial winter periods for big game. The 195 acres disturbed by moss rock activities are insignificant compared to the 275,000-acre herd area. Therefore, there would be minimal effects from this activity.

As a result of the approximate 200 acres of prescribed burning in the eastern part of the WSA over the next 20 years, the habitat would be improved.

Cutthroat trout habitat would remain unchanged (e.g., Spring Branch and Conway creeks) with natural erosion occurring because of the inherent instability of the soils. The slope restrictions and restrictions on surface disturbance within 500 feet of live streams would prevent surface disturbance that could cause accelerated erosion. As a result of management in the Rock Creek ACEC, off-highway vehicles would not be allowed and surface occupancy for oil and gas would be precluded. Mineral extraction for salables would not be allowed in the ACEC. Forest management activities would be precluded in the Rock Creek drainage. Existing stream enclosures would be maintained. There is currently a closure to fishing ordered by the WGFD. Therefore, the habitat of the Colorado River cutthroat trout would be maintained and there would be no impacts due to the Proposed Action.

Conclusion

Wildlife habitat would be lost due to direct disturbance (49 acres due to oil and gas, 85 acres due to forestry operations, and 195 acres in the moss rock common use area). Approximately 20 to 25 percent of the elk would avoid the area around drilling for up to 5 years. The OHV closure would prevent disturbance to elk from motorized vehicles during critical periods. The preclusion of activities in the Rock Creek drainage would maintain the habitat of the Colorado River cutthroat trout.

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Impacts to Recreation Opportunities

Although approximately 4,200 acres on the WSA (in the Rock Creek ACEC) would be closed to motorized vehicles, there would be no change in OHV visitor use because there are no roads or trails in the drainage and no off-road use is occurring. The remaining 9,665 acres of the WSA would be limited to existing roads and trails. Since there are 5 miles of trails and there would be an additional 10 miles of roads associated with oil and gas activity, the roads and trails in the WSA would provide sufficient access to support the 525 OHV visitor-days of hunting and fishing. Approximately 300 visitor-days of hunters using horses would be maintained.

The seasonal closure during normal and severe winters (2 of every 3 years) would result in a loss of 100 to 200 visitor-days associated with snowmobile use during those years.

The quality of the recreation experience would be reduced as a result of oil and gas, timber management, and moss rock removal activities during the period the activity occurs. The reduction in the quality of the recreation experience would continue for the life of the wells for producing oil and gas wells.

Conclusion

The OHV closures would have no effect on hunting and fishing use (525 visitor-days). Seasonal restrictions on snowmobile use (100 to 200 visitor-days) would continue to displace users 2 out of every 3 years. Recreation use by hunters using horses would remain at the current level of 300 visitor-days annually. There would be a reduction in the level of satisfaction in the recreation experience for those who prefer primitive, unconfined recreation.

Impacts to Livestock Grazing

Livestock grazing would continue at the current level of 1,210 AUMs for cattle within the WSA from May 15 to September 30. The 8 range improvements and the 2 enclosures (along Rock Creek) would continue to be maintained. Because of the OHV closure in the Rock Creek ACEC, the construction and maintenance of a spring and the maintenance of the 2 enclosures within the Rock Creek ACEC would have to be accomplished without the benefit of motorized vehicles. Motorized vehicles used in connection with livestock operations would be limited to existing roads and trails in the WSA.

Conclusion

Livestock use would remain at 1,210 AUMs. There would be no impact on livestock use.

Impacts to Timber Production

As a result of management prescribed for the Rock Creek ACEC, timber harvesting would be precluded on 1,322 acres of conifer and 18 acres of aspen. The preclusion of aspen harvest would result in no effect because there is no local demand for aspen products. The preclusion of conifer harvest would result in about 14,013,000 board feet of production, over the next 20 years, being foregone and eventually lost.

Timber harvesting would be allowed on approximately 85 acres of conifer in the WSA over the next 20 years, resulting in a production of 900,000 board feet.

The current level of mortality due to insects and disease would continue unchecked, resulting in a loss of about 520,000 board feet of production over the next 20 years. Forest stands would rejuvenate as mortality occurs. Total production is insignificant compared to the 400 million board feet produced from the nearby Bridger-Teton National Forest over 20 years.

Conclusion

Approximately 85 acres of conifer forest would be harvested in the next 20 years, with a production of 900,000 board feet of timber. About 520,000 board feet would be lost to insects and disease over the same period. Over 50 to 100 years, 14,013,000 board feet of conifer timber would be lost on the portion of the ACEC closed to timber management, as the stand ages. The forest character would not be lost because, as age and disease claim portions of the forest, young trees would take over and the stands would rejuvenate.

Unavoidable Adverse Impacts

Wilderness values would be lost in about half of the WSA due to direct disturbance on approximately 375 acres from oil and gas activity, moss rock removal, and forestry activities.

Irreversible and Irretrievable Commitments of Resources

Approximately 2,000 BCF of natural gas would be recovered WSA and moss rock would be removed from 195 acres. There are no other irreversible or irretrievable commitments of resources.

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Short-Term Uses versus Long-Term Productivity

Seven producing oil and gas wells and associated facilities would occupy approximately 49 acres for the life of the wells, estimated to be upwards of 30 years. After these sites are reclaimed, productive wildlife habitat would be re-established.

Harvesting of forest products from 85 acres would result in short-term adverse impacts but would increase long-term productivity of forest products by opening up some of the stands and controlling diseased stands. The harvesting would have beneficial long term impact on wildlife habitat because stands would be opened while providing for appropriate cover ratios for big game.

All Wilderness (13,865 acres designated)

All of the 13,865-acre Lake Mountain WSA would be designated as wilderness. The producing well associated with pre-FLPMA leased acreage would continue to produce from the WSA and would continue to occupy 7.5 acres with well site and associated facilities. Oil and gas leasing would not resume in the WSA.

Impacts to Wilderness Values

Naturalness

As a result of wilderness management, naturalness would be protected on all but 10 acres surrounding the existing gas well in the southeast portion of the WSA. The existing well is relatively well screened from view by trees. This makes the area around the well where naturalness is lost only 20 acres, rather than the entire acreage of pre-FLPMA leases (600 acres). Timber management, OHV use, and moss rock removal activities would be prohibited, preserving solitude.

Solitude

Wilderness management would result in no activity associated with timber management, moss rock removal, or OHV use. Producing oil and gas wells in this area are relatively quiet and have little effect on solitude when they go into production. The existing gas well in the southeast portion of the WSA (associated with a pre-FLPMA lease) would disrupt solitude on approximately 40 acres.

Primitive and Unconfined Recreation

Wilderness management would preserve primitive and unconfined recreation on all but 40 acres associated with the existing oil and gas well. The prohibition of timber production, moss rock removal, and OHV use would help preserve primitive and unconfined recreation.

Special Features

As a result of wilderness management, additional surface-disturbing activities would be precluded in the entire WSA. The Colorado River cutthroat trout and the naturally wintering herd of elk would be protected.

Conclusion

There would be no impact to naturalness, solitude, primitive and unconfined recreation, or the special features associated with the Colorado River cutthroat trout and the habitat for the naturally wintering herd of elk.

Impacts to Oil and Gas Exploration and Production

There are 600 acres of pre-FLPMA leases held by production. One gas well would be drilled and approximately 136 BCF of gas (\$177 million) would be produced if the typical Madison reservoir were tapped. There would be approximately 10.5 acres of surface disturbance due to the well location, access road, and other facilities.

Exploration for and development of oil and gas on the remaining 13,265 acres would not take place and would not contribute to regional oil and gas production. Production of an estimated 2,000 BCF of gas (\$2.6 billion) would be foregone. The 10 projected wells would be foregone.

The potential for production of gas resources is high, especially in the eastern portion of the WSA. Approximately 600 leased acres currently held by production are located within the WSA and the Graphite Federal unit. These deep Madison gas reserves are considerable with up to 2,000 BCF of gas, assuming that reservoir conditions to the east are also present beneath the entire WSA. The Madison reservoir is very large and laterally continuous. Therefore, it is likely that it continues below part or all of the WSA.

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Conclusion

Oil and gas production from the WSA itself would be 136 BCF of natural gas (\$177 million). Gas production would be foregone on 2,000 BCF of natural gas (\$2.6 billion). Ten projected wells would be foregone.

Impacts to Wildlife Habitat

Wilderness management precludes timber harvesting, moss rock removal, and OHV use in the entire WSA. The only oil and gas activity would be associated with the maintenance and production from the 1 well on a pre-FLPMA lease in the southeast portion of the WSA, occupying about 10 acres. Only 1 trip per week is needed because the well field, of which this well is a part (Exxon LaBarge Project of the Riley Ridge Field), is highly automated. It is monitored and controlled from a central facility several miles from the WSA. Big game have been moving back into the area since the well was drilled in 1985. Prescribed burning would result in a short-term beneficial impact to wildlife habitat.

Conclusion

Wildlife habitat would be protected in the entire WSA. Big game would be displaced from near the existing well once a week when workers check on the well. The habitat for the Colorado River cutthroat trout would be protected.

Impacts to Recreation Opportunities

Wilderness management would preclude OHV use, displacing 100 to 200 visitor-days associated with snowmobiles during 1 in every 3 years and displacing 400 hunter-days annually as hunters would go elsewhere. It is anticipated that there would continue to be 325 hunter-days annually in the WSA.

There would be no increase in visitor use as a result of wilderness designation for sightseeing, hiking, or photography. The quality of the recreation experience for those seeking primitive and unconfined recreation would be enhanced on all but 40 acres.

Conclusion

Total recreation visitor use would decrease by 400 visitor-days annually from the current level of 725 visitor-days. The quality of primitive and unconfined recreation would be enhanced on 13,825 acres. All snowmobilers (100 to 200 visitor-days during 1 of every 3 years) would be displaced to nearby areas which are adequate to support the additional use.

Impacts to Livestock Grazing

Wilderness management would preclude the use of motorized vehicles for livestock management activities. This would necessitate either a lower level of activity or the use of horseback or foot travel, rather than the 2 trips per month by motorized vehicle currently projected. Grazing would remain at the current level of 1,210 AUMs of cattle use. The grazing season would not change from the current May 15 to September 30.

Conclusion

Livestock grazing management would be unchanged with the exception of the prohibition of use of motorized vehicles to check on livestock and to perform maintenance on range improvements.

Impacts to Timber Production

Wilderness management would preclude timber harvest activities. As a result, approximately 900,000 board feet of conifer timber production would be foregone over the next 20 years. In 50 to 100 years, this production would be lost as a result of disease, insects, and the aging of the stands. The character of the forest would remain because younger trees would replace the aging stands. No harvest of aspen products would occur. The loss in timber production is minor compared to the approximate 400 million board feet produced from the nearby Bridger-Teton National Forest.

Conclusion

No timber production would occur. Approximately 520,000 board feet of timber would be lost over the next 20 years due to disease and insects. Approximately 900,000 board feet of timber production would be foregone within the next 50 to 100 years.

1. The first part of the document
discusses the general principles
of the proposed system.

2. The second part of the document
describes the detailed structure
of the proposed system.

3. The third part of the document
describes the implementation
of the proposed system.

4. The fourth part of the document
describes the results of the
implementation of the proposed system.

5. The fifth part of the document
describes the conclusions of the
implementation of the proposed system.

RAYMOND MOUNTAIN WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Raymond Mountain WSA (Map RM-1) is in the Sublette Mountain Range (Lincoln County) in west-central Wyoming, approximately 85 miles south of Grand Teton National Park and 50 miles northwest of Kemmerer, Wyoming. The WSA is about 19 miles long and 4 miles wide at the widest point, and contains 34,456 acres (Map RM-2): 32,936 acres of public land; 1,320 acres of State land; and 200 acres of private land. The entire 13,530-acre Raymond Mountain Area of Critical Environmental Concern (ACEC) is within the Raymond Mountain WSA. The WSA is one of two in the Wyoming portion of the Overthrust Belt.

Proposed Action and Alternatives

Two alternatives were analyzed: 1) all of the 32,936-acre Raymond Mountain WSA would be wilderness (Proposed Action), and 2) No Wilderness, none of the 32,936-acre Raymond Mountain WSA would be wilderness (No Action).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

All Wilderness (Proposed Action) - 32,936 acres designated

All 32,936 acres of public land in the WSA would be designated wilderness. No oil and gas leasing and no surface-disturbing activities would occur unless associated with valid existing rights. There would be no mineral exploration or development. Motorized vehicles would be prohibited. In addition, there are 1,320 acres of State land and 200 acres of private land within the WSA.

Mineral Resources

Oil and Gas Exploration and Development

Oil and gas leases would not be offered in the entire WSA (32,936 acres). There are no pre-FLPMA oil and gas leases in the WSA. Therefore, there would be no surface disturbance associated with oil and gas activities.

Solid Mineral Exploration and Development

No mineral development would be allowed with the possible exception of phosphate. There is an existing phosphate lease (W-0280560) just inside the western boundary of the WSA (approximately 189 acres). While phosphate may exist in the WSA, the main part of the deposit occurs outside the WSA. There is no current production from this deposit and no development is anticipated. Existing sources, in better locations, are adequate to meet current and anticipated future demands.

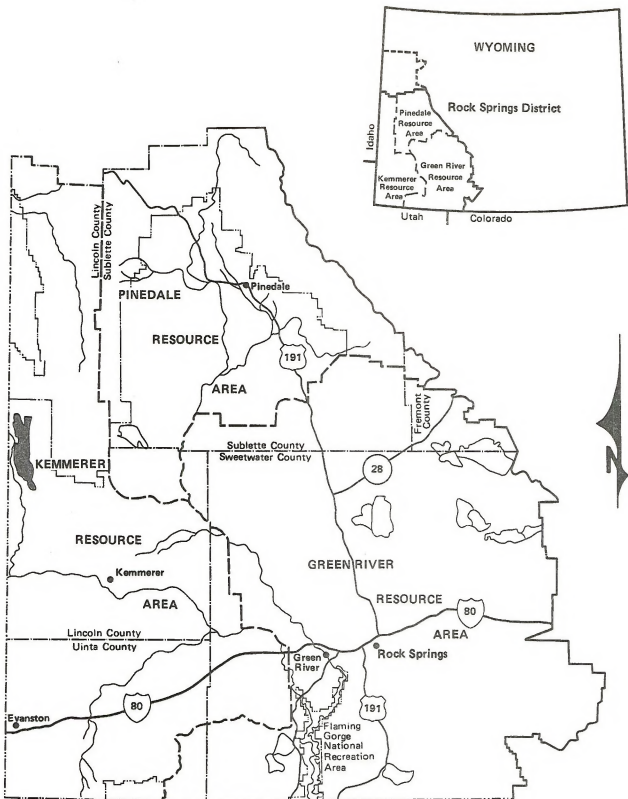
While coal may occur in the WSA, its development potential is low and no activity is anticipated because the reserves are expected to be small and there is coal available nearby which is more extensive and accessible. No activity related to other leaseable minerals is anticipated. There are no known locatable minerals that would be economically mineable under current conditions and no claims are currently recorded. No industry interest has been expressed for salable minerals and no interest is anticipated.

Off-Highway Vehicle Use (OHV)

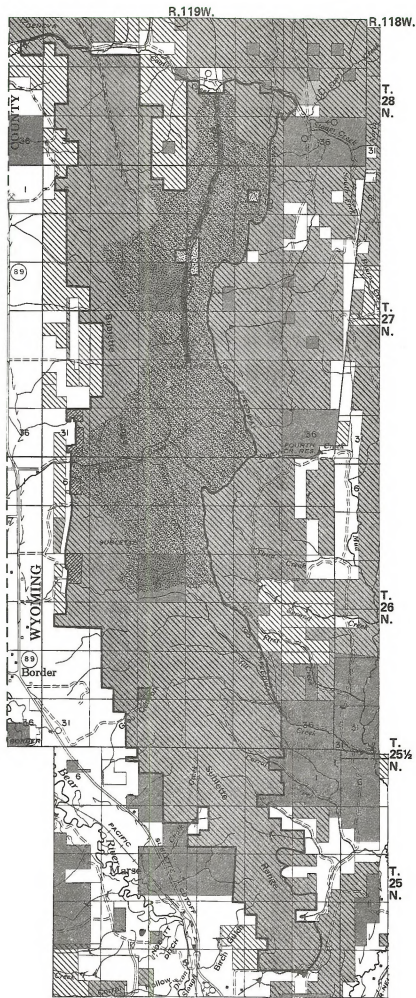
Motorized vehicles would be prohibited in the WSA. Existing range improvements are limited and would be maintained without using motorized vehicles. Any new range improvements would have to meet nonimpairment criteria.

Recreation Use

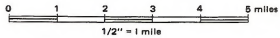
Hunting and fishing would be allowed without the benefit of motorized vehicles. No recreation developments are anticipated. The area would be managed to provide primitive, nonmotorized recreation. No snowmobiling would be allowed, displacing 100 visitor-days. Although there would be camping, horseback riding, and similar recreation activities (less than 300 visitor-days annually), the main activity in the WSA would be hunting and fishing (1,250 visitor-days annually).



Map RM-1
RAYMOND MOUNTAIN WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



- Wilderness Study Area Boundary
- ▨ Excluded Area
- ▩ Raymond Mountain Wildlife ACEC
- Public Land (Administered by BLM)
- Private Land
- State Land
- ▨ Federal Minerals
- ▩ Existing Phosphate Leases



Map RM-2
LAND AND MINERAL STATUS
 Raymond Mountain WSA

RAYMOND MOUNTAIN WSA

Grazing Use

The Raymond Mountain WSA is totally inside the Smiths Fork allotment and comprises 36 percent of the total allotment area (90,937 acres). Grazing use would continue at the current level of 4,800 AUMs for cattle and 9,300 AUMs for sheep. The grazing season would continue to be May 16 to November 1.

The 2 livestock enclosures along Huff Creek would be maintained, but without the benefit of motorized vehicles beyond the cherrystemmed roads leading into the area. No new range improvements are proposed.

Noxious weed control and predator control (coyotes that prey on domestic sheep) would occur using nonmechanized methods that would not impair wilderness character. Predator control would continue using methods that comply with nonimpairment criteria. Control methods would have to be on foot or horseback.

Wildlife Habitat Management

Yearly, non-mechanized maintenance on existing stream enclosures and instream structures would continue. Prescribed burning on 50 to 100 acres would improve wildlife habitat. Drift fences (5 to 10 miles) and water developments (springs) proposed for livestock management would improve wildlife habitat and decrease competition with livestock.

Forestry Management

Timber harvesting would not be allowed. The potential yield of 26,500 board feet of forest products annually would be foregone.

No Wilderness (No Action)

None of the 32,936-acre Raymond Mountain WSA would be wilderness. The WSA would be managed under the guidelines of the Kemmerer Resource Management Plan (RMP) completed in 1986 and the Raymond Mountain ACEC management plan, completed in 1982.

Mineral Resources

Oil and Gas Exploration and Development

Oil and gas leases would be offered in the 32,936 acres of Federal mineral estate. Oil and gas leases would be subject to No Surface Occupancy restric-

tions in areas less than ¼ mile from perennial streams in the 13,530-acre Raymond Mountain ACEC (to protect the Bonneville cutthroat trout), and to seasonal stipulations to protect big game (moose, deer, and elk) crucial winter habitat (December 1 to May 15). Stipulations included in oil and gas leases are described in Appendix A.

The Raymond Mountain ACEC would be closed to seismic activity from October 1 to November 1 (during hunting season). The winter range would be closed to seismic activity from November 15 to April 30. The elk calving area would be closed to seismic activity from May 1 to June 30 (Map RM-3).

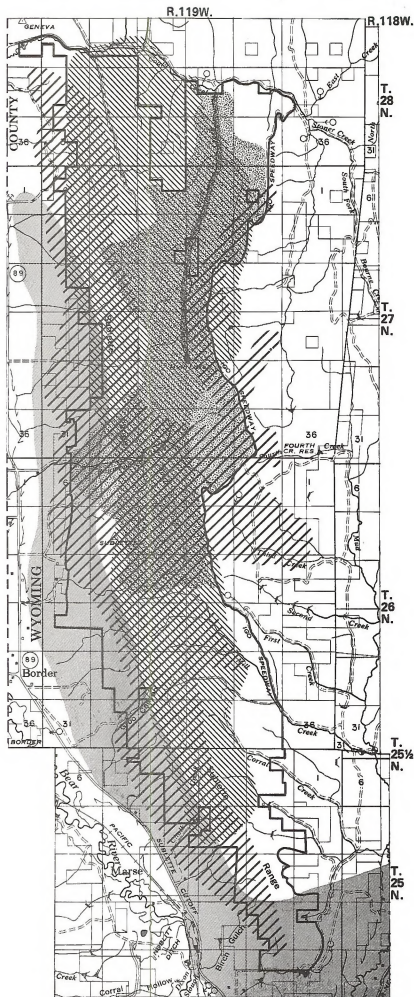
Because of the physical and economic problems associated with constructing roads and other facilities, a 1,280-acre spacing for wells in the ACEC was assumed. Ten wells would be drilled from the surface within the ACEC (on the periphery), resulting in 70 acres of surface disturbance. The success rate in this area is expected to be approximately 20 percent. 4 dry holes and 6 producers would be drilled and 5 to 10 miles of road would be constructed in the ACEC.







Inside the WSA but outside the ACEC (19,406 acres), surface-disturbing activities would be subject to surface protection and rehabilitation stipulations to protect wildlife, watershed, and recreation values. The northwest quarter of the WSA contains very steep slopes, similar to the ACEC. Surface disturbance would be restricted on steep slopes (over 25 percent), unstable soils, and close to live water (within ¼ mile in the ACEC). An estimated 25 wells would be drilled in the remaining area, resulting in 175 acres of surface disturbance. Eight of these wells would be dry holes and 17 would be producers.

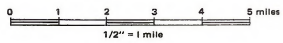
Industry would be required to reclaim all unused areas disturbed as a result of oil and gas activities. For dry holes, the area disturbed would remain at least partially unreclaimed for 3 to 5 years. For producing wells, the reclamation on approximately half (3.5 acres) of the disturbance for each well would be initiated in 3 to 5 years. The reclaimed area would provide wildlife habitat approaching pre-disturbance conditions in 10 to 15 years. The remaining 3.5 acres would be reclaimed when production ceases (30 years after drilling). After the dry holes and the portion of the disturbed area not needed for production on producing wells are reclaimed, there would be a total of 77 acres of long-term surface disturbance due to oil and gas facilities. Approximately 20 miles of roads would be built in the WSA, outside the ACEC. An estimated 39 BCF of gas would be recovered from the WSA.

Solid Mineral Exploration and Development

Access problems and the availability of suitable deposits of gravel outside the WSA have resulted in



-  Wilderness Study Area Boundary
-  Excluded Area
-  Raymond Mountain Wildlife ACEC
-  Moose Crucial Winter Range
-  Elk Crucial Winter Range
-  Mule Deer Crucial Winter Range



Map RM-3
CRUCIAL BIG GAME HABITAT
 Raymond Mountain WSA

RAYMOND MOUNTAIN WSA

no industry interest in salable minerals in the WSA. No activity related to salable minerals is likely.

No development of the phosphate resource is anticipated because existing sources are adequate to meet current and anticipated future needs. No activity related to other leasable minerals is anticipated. While coal may occur in the WSA, its development potential is low. There are no known locatable minerals that would be economically minable under current conditions. Therefore, no activity related to locatable minerals is anticipated.

Off-Highway Vehicle Use (OHV)

The Raymond Canyon Trail, Raymond Canyon, White Canyon, and 2 two-track trails off of IGO Speedway into Raymond Canyon are closed to motorized vehicle use. New access roads for oil and gas (25 to 30 miles) and timber management (approximately 3 miles of road) would be available for OHV use. In the remainder of the area, OHV use would be limited to existing roads and trails.

Five to 10 miles of new access roads are expected in the Raymond Mountain ACEC. Most access roads to wells in the ACEC would be relatively short ($\frac{1}{2}$ to 1 mile). The increased access into the ACEC would not penetrate into the drainage.

Snowmobile use would be allowed.

Recreation Use

The current 1,250 visitor-days annually for hunting and fishing in the WSA would continue. About half of this use enters the WSA using existing cherrystemmed roads only for access. The users would not use motorized vehicles during most of their day spent in the WSA. Fishing occurs mostly on Raymond and Huff creeks. Hunting would be allowed but hunters using motorized vehicles would only be allowed on the Huff Creek Road, the 2 roads on the southeast corner of the WSA, and on 28 to 33 miles of new access roads for oil and gas and timber production. Six outfitters would continue to use the WSA for day use and hunting camps.

The current 100 visitor-days annually of snowmobiling is expected to continue.

No recreation facilities would be built in the WSA. The current recreation uses of the WSA would remain the same.

Grazing Use

Grazing management practices (Smiths Fork grazing allotment) would not change from those cur-

rently in place and would not be different than for All Wilderness. The entire Smiths Fork grazing allotment would be managed intensively. The estimated carrying capacity in the WSA is 4,800 AUMs for cattle and 9,300 AUMs for sheep, with use occurring from May 16 to November 1, is expected to continue. Two exclosures along Huff Creek would continue to protect and improve riparian and fisheries habitat. The stream exclosures would be maintained. However, motorized vehicles would be restricted to existing roads and trails and would not be used in the maintenance work.

Motor vehicle access would be allowed along the Huff Creek Road, Corral Creek Road, and First Creek Road. As under the Proposed Action (All Wilderness), motorized vehicle use for livestock management would be allowed on new access roads built for oil and gas activities and timber production.

No range improvement projects in the WSA are anticipated at this time. Noxious weed control could be carried out using less restrictive measures which may result in some cost savings. The same is true of predator control efforts.

Wildlife Habitat Management

Yearly maintenance on existing stream exclosures and instream structures would continue. There would be some habitat improvement to maintain or improve wildlife habitat (e.g., prescribed burning, water developments, cavity nesting sites for peregrine falcons, grazing exclosures, instream structures). Existing habitat would be managed to maintain existing populations of wildlife. Timber harvesting of quaking aspen would be designed to enhance wildlife habitat.

Forestry Management

Timber harvesting would be allowed subject to restrictions on timber harvesting on steep slopes (to minimize erosion and sedimentation) and provisions protecting wildlife (seasonal restrictions to protect crucial winter habitat), watershed, and recreation values. These restrictions would be similar those for oil and gas activities.

Timber harvesting would be excluded from the watershed to protect the habitat for the Bonneville (Bear River) cutthroat trout. Demand for minor forest products such as fuelwood, posts and poles, Christmas trees, and house logs would be met from intensively-managed stands within the WSA. Approximately 100 acres would be harvested over 20 years. Approximately 75 percent of this (75 acres) would be from within the Raymond Mountain ACEC, but not on the steep slopes of the drainage. The restrictions (Appendix A) on timber harvesting in the

RAYMOND MOUNTAIN WSA

ACEC would be the same as those for other surface-disturbing activities (i.e., restrictions on activity on steep slopes, within ¼ mile of live water in the ACEC, on unstable soils, and during the crucial winter period for big game). Harvesting of quaking aspen would produce firewood and would be designed to enhance wildlife habitat. Approximately 3 miles of roads would be built to facilitate timber harvest.

CHAPTER II - Affected Environment

Introduction

The Raymond Mountain WSA has diverse vegetation (Map RM-4) and steep topography. It is forested over most of the WSA, interspersed with open parks. The southern end of the WSA contains big sagebrush stands. There are several creeks in the canyons in the WSA. Huff and Raymond creeks contain a pure strain of Bonneville or Bear River cutthroat trout. The area is important moose, deer, and elk habitat. Wildflowers are common in the WSA during the spring.

The dominant use of the Raymond Mountain WSA is livestock grazing and big game hunting. Fishing occurs in Raymond and Huff creeks. Camping is usually associated with hunting and fishing. Horseback riding, picnicking, hiking, backpacking, sightseeing, and wildlife photography are other uses of the area.

The entire 13,530-acre Raymond Mountain ACEC is within the Raymond Mountain WSA. The ACEC is managed primarily to protect the sensitive Bonneville cutthroat trout and its habitat, and big game habitat (elk, deer, moose).

Wilderness Values

The Raymond Mountain WSA contains 32,936 acres of public land, 1,320 acres of State land, and 200 acres of private land. A 6-mile road penetrates the northern boundary and terminates at Huff Lake. The road is excluded, or cherrystemmed, from the WSA (Map RM-2). The Raymond Mountain WSA meets the criteria in Section 2(c) of the Wilderness Act of 1964.

Naturalness

The WSA contains several minor imprints of humans including a communication site with access

road; several small phosphate exploration sites; 2 abandoned well sites; a road which penetrates the WSA along Huff Creek to some private land; several 2-track trails; and evidence of livestock trailing. These intrusions, when viewed in the context of the entire WSA, are essentially unnoticeable.

Solitude

Because of the steepness of the terrain and the accompanying vegetation, an outstanding opportunity for solitude exists throughout the WSA. There are many secluded spots which permit undisturbed recreation.

Primitive and Unconfined Recreation

The WSA is suited to cross-country skiing, snowshoeing, hiking, backpacking, fishing, hunting, horseback riding, climbing, nature photography, birdwatching, and sightseeing. The opportunity for these activities is considered outstanding in relation to other areas in the region. There are no visitor facilities in the WSA.

Primitive camping occurs along Raymond Creek at existing rock fire rings. Other primitive camping areas are west of Huff Creek and in White Canyon. They are primarily hunting campsites. Hunters often walk into the area from outside the WSA because the terrain is very steep and difficult to negotiate. People who hike and backpack also engage in nature study. Most horseback riding occurs in Raymond Canyon, the southern pack trails, and White Canyon.

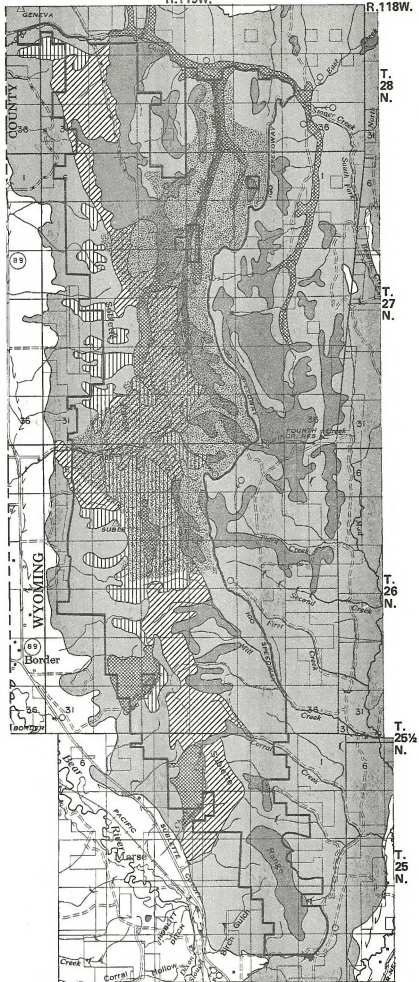
Sightseeing occurs separately and in conjunction with other recreational activities. It is often accompanied by motorized recreation. Opportunities for vista views of the Bear River Valley, Smiths Fork drainage, the Tunp Range, and the Salt River Range are common. The WSA has high scenic values and provides good opportunities for geologic sightseeing.









Special Features

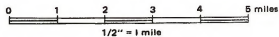
The area has numerous special features which enhance the wilderness qualities. The abundant and diverse wildlife species (including the rare Bonneville cutthroat trout), the great botanical diversity, abundant species of wild flowers, unusual geologic formations, and numerous viewpoints from which outstanding scenery can be enjoyed are the primary supplemental values.

R.119W.

R.118W.



-  Wilderness Study Area Boundary
-  Excluded Area
-  Raymond Mountain Wildlife ACEC
-  Sagebrush-Grass
-  Meadow and Riparian
-  Conifer
-  Mountain Shrub
-  Broadleaf Tree



Map RM-4
VEGETATION TYPES
Raymond Mountain WSA

Mineral Resources

There are no pre-FLPMA oil and gas leases in the WSA. The recoverable reserves in the Raymond Mountain WSA are estimated to be 39 billion cubic feet (BCF) of gas. This is based on information contained in the "Update on the Wyoming-Idaho-Utah Thrust Belt: Joint Meeting of the Wyoming Geological Association, Wyoming Geological Survey, and Department of Geology at the University of Wyoming" (1980). Estimates from this report were adjusted based on site-specific information applicable to the area. The depth to productive reserve in this area is expected to be in excess of 12,000 feet.

Part of the Raymond Mountain WSA is prospectively valuable for coal (in sections 26, 27, 34, and 35, T. 28 N., R. 119 W.) according to the U.S. Geological Survey (1976). The coal is in the Cokeville Formation (lower Cretaceous Age), which dips to the east from 45 degrees to vertical in the area. However, sections 27 and 34 may have been included in the prospectively valuable determination in error, since it appears that these sections are not underlain by the Cokeville Formation. The Cokeville Formation coal reserves in the WSA would be very small. This fact, combined with the availability of more extensive and accessible coal in other parts of Wyoming, makes the Raymond Mountain WSA low potential area for coal development.

The Phosphoria Formation of Permian age occurs along the western edge of the WSA. The outcrop lies outside the WSA, with the exception of 2 areas, part of section 31 (about 10 acres), T. 27 N., R. 119 W., and part of sections 18 and 19, T. 26 N., R. 119 W. A phosphate lease (Tenneco - W-0280560) is inside the WSA boundary, just east of the Phosphoria outcrop. No recent activity has occurred on the lease. The lease was issued as a noncompetitive "fringe acreage" lease to fill in small pieces of Federal minerals between patented mining claims (this helped the mining claim holder form a logical mining unit). The Phosphoria Formation occurs on a small part of the lease in section 31, T. 27 N., R. 119 W. It may also exist in other small parts of the western edge of the lease. Part of section 26, T. 25 N., R. 119 W., is included in a phosphate reservation (Executive Order July 2, 1910). No phosphate occurs in the surface geology of this part of the reservation.

The likelihood of development of phosphate and associated minerals is low, in part, because there is little information on the continuity, quality, or mining condition of the Phosphoria Formation in the WSA.

The sedimentary formations do not indicate much potential for locatable minerals, and no interest is known to exist. Bentonite may occur in the Cokeville Formation (Rubey, et al. 1976), but there are no indi-

cations of a commercial deposit or public interest, especially in view of other bentonite deposits in Wyoming.

There are several accumulations of colluvium and terrace gravel, much of it along Salt and Huff creeks. There has been no industry interest in these potential gravel sources and none is anticipated.

Wildlife

The WSA provides excellent wildlife habitat (Map RM-3) for a variety of species. The WSA contains the 13,530-acre Raymond Mountain ACEC (Map RM-2).

Terrestrial

The WSA serves as habitat for mule deer, elk, and moose. Approximately 75 percent of the WSA is classified as crucial winter range for elk. This habitat is especially important during severe weather conditions, when deep snow forces elk to use windblown ridges and lower elevations due to snow depth. Aerial surveys by the WGFD in February 1988 located 546 elk on Raymond Mountain, indicating an actual winter population of 600 to 700 elk.

Mule deer use the entire WSA as summer range or yearlong habitat. The southwestern portion (approximately 20 percent of the WSA) falls within mule deer crucial winter range. A small portion of the WSA is classified as winter/yearlong habitat and is normally used during mild winters and as spring-fall range. Recent surveys (1985 to 1988) indicate that approximately 500 mule deer use Raymond Mountain during the winter.

Moose use the WSA on a yearlong basis, and nearly the entire WSA is classified as crucial moose winter range. Aerial surveys in February 1988 counted 57 moose on Raymond Mountain, indicating an actual population of approximately 100 to 200 moose.

The Raymond Mountain WSA (32,936 acres) constitutes 21 percent of the 156,672-acre elk hunt area; 21 percent of the 156,672-acre mule deer hunt area; and 3 percent of the 1,086,080-acre moose hunt area.

Resident game birds using the WSA include sage, blue, and ruffed grouse. Waterfowl use is limited to the beaver pond complexes found on Raymond and Mill creeks and Huff Lake. Species include mallard, pintail, shoveler, American widgeon, gadwall, and green-winged and cinnamon teal. Sandhill cranes occasionally use these ponds for nesting habitat. Raptors include red-tailed hawk, ferruginous hawk, golden eagle, goshawk, prairie falcon, sharp-shinned hawk, and Cooper's hawk.

RAYMOND MOUNTAIN WSA

Numerous species of small mammals (game, fur-bearing, and nongame), amphibians, reptiles, and invertebrates occur within the WSA.

Aquatic

Huff, Raymond, and Coal creeks support populations of genetically pure Bonneville (Bear River) cutthroat trout (*Salmo clarki Utah*), a species designated as sensitive by BLM and rare by the WGFD and is proposed for listing (Candidate 2) by the U.S. Fish and Wildlife Service. Fisheries and aquatic habitat information in the WSA is extensively addressed in the Thomas Fork Habitat Management Plan which was implemented in 1979. A trout survival enclosure was constructed on Huff Creek to protect aquatic habitat.

Threatened and Endangered Species

Bald eagles, peregrine falcons, and whooping cranes, officially listed by the U.S. Fish and Wildlife Service as endangered species, may occur in the WSA. Bald eagles have been observed foraging in the WSA; however, no nesting sites are known. Most sightings were during the winter, although a bald eagle was observed in Raymond Canyon on June 1, 1978. Another was observed in the canyon in the spring of 1984. Peregrine falcon surveys were conducted in 1987 and 1988. Although peregrine falcons were not observed, Raymond Mountain has a high potential for natural or introduced populations due to its close proximity to foraging habitat, and remote nature with suitable cliff nesting sites. Whooping cranes have been observed flying through the Bear River Valley (west of the WSA) during the summer and during the spring and fall migration. There is no known whooping crane habitat in the WSA. There are no prairie dog towns in the Raymond Mountain WSA. There is no habitat for the Colorado squawfish or the humpback chub in the WSA.

Recreation Opportunities

Specific visitor use data are not available for the WSA; however, estimates on levels of use were made from field observations, public comments, and existing information. The WSA contributed approximately 1 percent or 1,250 of 134,118 visitor-days (hunting and fishing) in the Kemmerer Resource Area. The area provides other opportunities such as camping, horseback riding, hiking, snowmobiling, picnicking, and sightseeing (375 visitor-days annually).

Visitors to the WSA come mostly from the nearby towns of Raymond, Geneva, and Cokeville. They fish in the spring, summer, and fall; and hunt in the fall, using the primitive, dispersed campsites. Several out-of-state hunting parties use the WSA, but usually in conjunction with local hunters. Six outfitters use the WSA for big game hunting.

The primary recreation activity is the hunting of moose, elk, deer, and grouse. Elk and moose hunting are considered excellent, and deer and grouse hunting are considered good. Hunting occurs throughout the WSA, including the ridges, canyons, and hillsides.

These data represent 1987 data for hunt area 136, which includes the Raymond Mountain WSA. The WSA is 22 percent of the hunt area for elk and mule deer. Based on 1987 estimates, approximately 417 hunter-days were spent in the Raymond Mountain WSA for deer. About 25 percent of the deer hunters were nonresidents of Wyoming. The 1987 mule deer hunt yielded an estimated 52 bucks and 21 does. The WSA received an estimated 406 hunter-days for elk (hunt area 103) and yielded 4 mature bulls, 5 spike bulls, 8 cows, and 1 calf. Approximately 10 percent of elk hunters were nonresidents of Wyoming. State law requires that a nonresident hunter must have a State-licensed guide in a wilderness area. Six guides operate under BLM permits in the Raymond Mountain area. In 1987, 49 nonresidents hunted in deer hunt area 136 and 211 nonresidents hunted in elk hunt area 103.

Fishing occurs on Huff and Raymond creeks, and is considered good. These creeks receive 400 visitor-days per year. The primary game fish is the Bonneville (Bear River) cutthroat trout, which are small but plentiful. Special regulations limit the take to fish 10 inches or greater using artificial lures only.

Snowmobiling in the WSA is excellent (100 visitor-days annually). It occurs mainly on existing roads, ways, and trails. Some trapping occurs in the WSA, closely associated with snowmobiling.

Livestock Grazing

The Raymond Mountain WSA constitutes approximately 36 percent of the Smiths Fork allotment, which is an intensively managed allotment. Both cattle (4,800 AUMs) and sheep (9,300 AUMs) graze the area from May 18 to November 1. Since much of the WSA is steep sloped, portions of it are better suited to sheep than to cattle. There are 2 enclosures along Huff Creek. Two to 4 trips annually are made into the WSA using motorized vehicles on the cherry-topped roads (during the 5½-month grazing season).

RAYMOND MOUNTAIN WSA

A noxious weed invasion on the west side of the WSA (up to 100 acres) could invade public lands along Huff Creek and private lands. The method of choice for controlling the noxious weed is application by truck of Banvil, Tordon, or 2,4,D during the spring or early summer.

Water Resources

Water in the WSA is used for wildlife, livestock, and recreation. Immediate downstream water uses of the perennial streams are primarily irrigation, livestock watering, and wildlife. Consumptive use figures are not available. Instream flow requirements for fisheries, recreation, and channel maintenance have not been calculated.

In 1980, a Level II Water Quality Reconnaissance Survey was conducted on 3 streams in the Thomas Fork drainage (Upper Huff Creek, Lower Huff Creek, and Coal Creek) and on 1 stream in the Raymond Mountain drainage (south fork of Raymond Creek). Average annual sediment yield from the 4 streams monitored in 1980-1981 was 0.25 tons per acre-foot of stream water. The major drainages in the Raymond Mountain WSA are: Thomas Fork (11,397 acres in the WSA), Raymond Creek (16,162 acres in the WSA), and Smiths Fork (6,879 acres in the WSA). Some flood damage has occurred along perennial waters in the WSA.

There are no stream gauging stations in the WSA. Few known water quality problems exist. However, trend data indicate deteriorating conditions are present in some streams. Potential problems associated with present uses in the WSA are losses of stream-bank vegetation and reductions in channel stability. The principal cause of vegetation loss, channel instability, and erosion is the concentration of livestock use in bottom lands, due to steep terrain. Increased pressure from recreationists also affects vegetation and leads to increased erosion and stream sedimentation.

Forestry Resources

The WSA contains 1,500 acres of Douglas fir, 1,200 acres of subalpine fir, and 1,700 acres of aspen. These acreages represent 36 percent of the Douglas fir; 23 percent of the subalpine fir; and 31 percent of the aspen available in the Kemmerer Resource Area.

Several forestry plots were studied to determine commercial volumes of timber. Two of these plots are classified as sawtimber and the remaining plots are classified as poletimber. The 2 sawtimber plots

indicate that much of the volume is on steep slopes (80 to 90 percent). Retrieval of sawtimber from these slopes for commercial purposes, with current local logging practices, would not be economically feasible.

The presence of insect and disease infestation could accelerate the initiation of logging within the WSA. The Forest Service conducted aerial surveillance of the forest lands adjacent to and within the WSA. Their observations indicate a 5 percent mortality rate. If this mortality rate rose to 15 percent, BLM would consider logging the 100 acres in the WSA before the next 20 years.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of environmental consequences for the All Wilderness and No Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irremediable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-2 summarizes the impacts by alternative.

Proposed Action and Alternatives

All Wilderness (Proposed Action) - 32,936 acres designated

The Proposed Action is to designate all of the 32,936 acres of public land in the Raymond Mountain WSA. In addition, there are 1,320 acres of State land and 200 acres of private land (inholdings) which contain wilderness values similar to those of the WSA. These lands would be added to the wilderness area in the event they are acquired. The additional lands would result in a more manageable wilderness area.

Impacts to Wilderness Values

Wilderness designation would assure protection of wilderness values on 32,936 acres of public land.

RAYMOND MOUNTAIN WSA

TABLE 2-2

SUMMARY OF IMPACTS TABLE RAYMOND MOUNTAIN WSA

	Proposed Action (All Wilderness)	Alternative A (No Wilderness)
Public Lands Designated	32,936 acres	0 acres
Other Lands	1,320 acres of State land and 200 acres of private land would be added, if acquired.	1,320 acres of State land and 200 acres of private land in the WSA.
Area of Critical Environmental Concern (ACEC)	13,530-acre Raymond Mountain ACEC would retain wilderness values.	13,530-acre Raymond Mountain ACEC would retain wilderness values.
Wilderness Values	Naturalness retained in the entire WSA.	Naturalness lost on 345 acres.
Solitude	Solitude retained in the entire WSA.	Solitude lost on 345 acres.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation retained in the entire WSA.	Opportunities for primitive and unconfined recreation retained in the ACEC but lost in the rest of the WSA.
Special Features	Special features, including habitat for the Bonneville cutthroat trout and the ACEC, retained in the entire WSA.	Special features, including habitat for the Bonneville cutthroat trout and the ACEC, retained in the entire WSA.
Minerals		
Oil and Gas	39 BCF of natural gas would be foregone (\$51 million).	39 BCF of natural gas (\$51 million) would be recovered.
Wells in Area Not Designated	0	35
Surface Disturbance in Area Not Designated	0 acres	245 acres
Solid Minerals	No potential	No potential
Wildlife Habitat and Populations	Reduced activity would benefit wildlife. Big game winter range would be protected. Big game numbers would not be affected. Habitat for the Bonneville cutthroat trout maintained.	Oil and gas activities would result in a minor reduction in big game numbers in the WSA but no change in numbers in the herd units. Habitat for the Bonneville cutthroat trout maintained.
Recreation Opportunities	Loss in snowmobile use in WSA (100 visitor-days). No loss regionally.	Snowmobile use (100 visitor-days annually) maintained.

RAYMOND MOUNTAIN WSA

TABLE 2-2 (Continued)

SUMMARY OF IMPACTS RAYMOND MOUNTAIN WSA

	Proposed Action (All Wilderness)	Alternative A (No Wilderness)
Recreation Opportunities (Continued)	<p>Habitat protection in the ACEC would benefit big game hunting and fishing. Current use of 800 hunter-days annually and 400 visitor-days annually for fishing maintained.</p> <p>No change in opportunities for primitive recreation</p>	<p>Hunter use in the WSA reduced by 25 percent in the long term.</p> <p>Opportunities for primitive recreation retained in most of the ACEC but would be lost in the rest of the WSA.</p>
Livestock Grazing	<p>Occasional inconvenience to livestock operator due to restrictions on motorized vehicle use.</p>	<p>No effect on livestock grazing.</p> <p>Allotment of which WSA is a part may be adjusted to accommodate less intensive management in WSA. Water availability is good. Grazing management practices and numbers would not be affected.</p>
Water Quality	<p>Water quality would improve slightly. Elimination of motor vehicles would stabilize streambanks.</p> <p>Water quality in the ACEC would be improved.</p>	<p>Increase water quality problems in the short term. Water quality would return to current levels as reclamation takes place. Soil compaction and vegetation loss would increase runoff and erosion.</p> <p>Restriction in the ACEC would protect major streams and help maintain water quality.</p>
Timber Production	<p>Forest resources would be protected and would not be managed as an economic resource.</p>	<p>Timber resources would be foregone on 245 acres affected by oil and gas activities. Some timber harvesting would occur, but not in the ACEC. Regional timber production would not be increased.</p>

RAYMOND MOUNTAIN WSA

The entire area would be protected from surface-disturbing activities and mineral entry.

Naturalness

Naturalness would be preserved in the entire WSA because there are no existing oil and gas leases in the WSA. No new leases would be issued. Therefore, there would be no disturbance from oil and gas activities. No timber harvesting would take place. Off-highway vehicles (OHVs) would be prohibited.

Existing intrusions would be unnoticeable in most of the WSA because of the topography, thereby retaining the area's naturalness. Scenic values would be retained and the WSA would remain natural in character.

Solitude

Solitude would be preserved in the entire 32,936-acre WSA as a result of prohibiting mechanized activities in the WSA. No oil and gas activity would take place. No timber harvesting would take place. Off-highway vehicles (OHVs) would be prohibited. The cherry-stemmed road to Huff Lake would affect solitude on 320 acres on areas near the road to a minor extent (as a result of noise from motorized vehicles outside the WSA).

Primitive and Unconfined Recreation

Those interested in dispersed recreation associated with wilderness values (including cross-country skiing, camping, backpacking, and fishing) would find the wilderness character of the Raymond Mountain WSA preserved if the WSA were designated wilderness. The opportunities for these types of recreation would be maintained. There would be no change in the number of visitor-days in the WSA for primitive and unconfined recreation.

Special Values

The area's special values associated with the biological diversity in the area would be preserved if the WSA is designated wilderness.

Conclusion

Wilderness values in the WSA would be retained due to the lack of development activities and the elimination of motorized vehicle use.

Impacts to Oil and Gas Exploration and Production

The recoverable reserves in the Raymond Mountain WSA are estimated to be 39 billion cubic feet (BCF) of natural gas (\$51 million). There are no existing oil and gas leases in the WSA and leasing would not resume if the WSA is designated wilderness. If the WSA is designated wilderness, the entire potential production of 39 BCF of gas from 23 producing wells would be foregone. The opportunity to explore for oil and gas resources would also be foregone.

Conclusion

There would be no oil and gas production from the WSA itself. Production of approximately 39 BCF of natural gas (\$51 million) from 23 producing wells would be foregone.

Impacts to Wildlife Habitat and Populations

As a result of prohibiting oil and gas activities, timber harvesting, and vehicle-dependent recreation, there would be a benefit to wildlife and wildlife habitat. Crucial big game winter range would be fully protected from surface disturbance and human activity associated with such disturbance. Big game would not be displaced. Hunting pressure and available winter range would keep big game populations at approximately current numbers.

No change in grazing management is proposed. Wildlife, including big game, are not being affected by current AUMs and livestock management practices. Therefore, there would be no impacts associated with livestock grazing.

Habitat for the Bonneville (Bear River) cutthroat trout would be protected because no development that could affect the watershed, and adversely affect the fish, would be allowed. Livestock use would continue. The enclosures would continue to be maintained. Motorized vehicle use would be prohibited within the WSA, eliminating, for the most part, the disturbance to big game and the aquatic habitat caused by vehicles crossing streams. This would minimize sedimentation into streams and associated adverse impacts to the fish. Prohibiting timber harvesting and vegetation manipulation would allow natural succession of the ecosystem.

Raptor nesting areas would be protected from disturbance and raptor nesting success would be enhanced.

RAYMOND MOUNTAIN WSA

No threatened or endangered species would be affected. Potential peregrine falcon habitat would be protected in a natural state, allowing for re-introduction by natural or artificial means.

Conclusion

Big game would be protected because of the protection of big game winter range and the reduced human activity which could displace the animals. Undisturbed winter range would help to maintain big game numbers. Habitat for the Bonneville cutthroat trout would be maintained because of the preclusion of surface-disturbing activities. Threatened, endangered, and sensitive species would not be adversely affected.

Impacts to Recreation Opportunities

The closure to motorized vehicles would eliminate the current level of snowmobile use (100 visitor-days annually). Currently, snowmobile use occurs 8 out of 10 years. A closure has been imposed 2 out of the 10 years to protect big game from harassment on crucial winter range. Therefore, the 100 visitor-days per year would be lost 8 out of 10 years.

The current use of approximately 400 visitor-days annually for fishing would remain the same. The use of the WSA for hiking and horseback associated recreation would remain the same.

In both the short and long term, hunting would remain about the same since the access provided by the cherrystemmed roads would remain. No change from hunters who use vehicles to hunters who hunt on foot or on horseback is expected because the terrain in the WSA is steep and difficult to negotiate and virtually no motorized vehicles are currently used. Proximity to some form of access, whether it is a road or a pack trail would determine the level and type of hunter use. Therefore, no change in hunter use is anticipated. However, the levels of use by hunters using outfitters may increase by 20 percent because, in a wilderness area, outfitters are required by State law for hunters from out of Wyoming. Deer hunt area 136 has the highest nonresident success of the 7 hunt areas in the Wyoming Range. This success rate would not change due to wilderness designation.

Other recreation opportunities would be enhanced, some substantially (e.g., the opportunity to experience solitude). The number of people using the WSA for various recreation purposes, other than hunting and snowmobiling, is 350 to 400 annually. This use is not expected to change if the WSA were designated wilderness.

Conclusion

There would be a 100 visitor-day displacement in recreation opportunities for activities which use snowmobiles. Others recreation users would perceive an increase in the quality of the recreation experience because their activities (e.g., fishing, picnicking, photography) would be enhanced by the lack of motorized vehicles and development activities. There would be a continuation of current visitor use associated with hunting and fishing.

Impacts to Livestock Grazing

Wilderness designation is not expected to affect the current grazing use levels of 4,800 AUMs for cattle and 9,300 AUMs for sheep (May 16 to November 1). Current water and forage availability in the WSA is good and is expected to continue to support existing livestock numbers. No range improvement projects are planned, so none would be foregone. Control of noxious weeds would be permitted on the west side of the WSA. Motorized vehicles would be used near existing roads and trails outside the WSA, with only short trips into the WSA to apply the chemicals by hand. Motorized vehicle access along the cherrystemmed roads would continue to be available for livestock management purposes.

Conclusion

Current livestock management practices and numbers in the WSA are not expected to change. Grazing use would continue at 4,800 AUMs for cattle and 9,300 AUMs for sheep from May 16 to November 1.

Impacts to Water Quality

The existing good water quality throughout the WSA would continue. The overall reduction in access to the area and the watershed would help to maintain and improve water quality by increasing vegetation cover and soil stability. Overall, the level of accelerated erosion and sedimentation would be reduced slightly below current levels.

The existing habitat improvement projects (e.g., livestock enclosures, water developments, and instream structures) would continue to help to reduce erosion and sedimentation below current levels.

Conclusion

The existing good water quality in the WSA would improve slightly as a result of continuation of livestock enclosures and instream structures.

RAYMOND MOUNTAIN WSA

Impacts to Timber Production

Vegetation (including forest resources) would be protected in the entire WSA. No forest products would be harvested. The WSA would not serve as a source of timber, firewood, or Christmas trees. The current annual yield from the Bridger-Teton National Forest nearby is 20 million board feet. The yield in forest products that would be foregone if the WSA were designated wilderness (26,500 board feet annually) could easily be accommodated elsewhere from the BLM Rock Springs District or from the Bridger-Teton National Forest. The same is true for the firewood that would be foregone from the WSA (approximately 2.5 acres, or about 10 cords annually).

Individuals seeking forest products such as firewood and Christmas trees would not have to travel very far to reach a readily available source from public or national forest lands.

Conclusion

No forest products would be harvested and 530,000 board feet of forest products would be foregone over the next 20 years (26,500 board feet annually). However, this would not result in a lack of supply of forest products because it compares to only 0.13 percent of the annual timber production from the nearby Bridger-Teton National Forest.

Unavoidable Adverse Impacts

The current level of 100 visitor-days of snowmobile use annually would be eliminated.

Irreversible and Irrecoverable Commitments of Resources

A projected 39 BCF of natural gas and 530,000 board feet of forest products would be foregone over the next 20 years. There would be no other irreversible or irretrievable commitments of resources.

Short-Term Uses versus Long-Term Productivity

The long-term productivity of the WSA would be maintained in its present condition because no surface-disturbing activities would occur.

No Wilderness (No Action)

Wilderness designation would assure protection of wilderness values on 32,591 acres of public land.

The WSA would be open to mineral entry and leasing. The 13,530-acre Raymond Mountain ACEC would continue to be managed under the ACEC management plan.

Impacts to Wilderness Values

The primary objectives for the Raymond Mountain WSA would be to maintain the quality of the dispersed outdoor recreation experience and to provide for the protection of wildlife values. While other activities would be allowed, they would be conditioned to maintain the quality of the recreation experience, to the degree possible.

Naturalness

Naturalness would be preserved on 13,385 acres in the 13,530-acre Raymond Mountain ACEC because of the restrictions on surface-disturbing activity (e.g., oil and gas and timber harvesting) on steep slopes and within 1/4 mile of live water in the ACEC. These restrictions would keep surface-disturbing activities, which result in losses in naturalness, out of the Rock Creek drainage which is the major component of the ACEC.

The physical problems associated with construction on steep slopes (above 25 percent) and in wet areas would limit the number of wells located in the heart of the ACEC to 1 or 2 wells. Oil and gas wells, access roads, and associate facilities could be approved in these areas but they would require exceptions to lease stipulations. More detailed engineering of proposals would generally be required to demonstrate to the BLM Authorized Officer that proposals in such areas could be approved without violating the intent of including the stipulation in the oil and gas lease. Most, if not all, of the 10 wells in the ACEC (disturbing 70 acres) would be located on the periphery of the ACEC because of restrictive lease stipulations in the ACEC. Crucial winter habitat for big game and habitat for the Bonneville (Bear River) cutthroat trout would be protected in the ACEC because of lease stipulations.

Timber harvest on 75 acres would result in a loss of naturalness, as would the development of the 10 oil and gas wells. The harvest of quaking aspen, which constitutes 50 percent of the 75 acres harvested, would affect naturalness in the ACEC for only 2 to 3 years following harvest. The remaining acreage to be harvested in the ACEC would affect naturalness for 15 to 20 years until the evidence of the disturbed area is substantially unnoticeable.

Naturalness in the ACEC would be enhanced by off-road vehicle limitations and the proposed 2-track trail closures.

RAYMOND MOUNTAIN WSA

In the portion of the WSA outside of the ACEC, naturalness would be lost in 19,206 acres because of oil and gas activities and timber harvesting.

Solitude

Opportunities for solitude would decrease in the WSA. Although the steep terrain offers outstanding opportunities for solitude, oil and gas seismic activities could be observed and heard from canyon bottoms, as well as ridgetops.

In the ACEC, solitude would be mostly preserved on 13,385 acres. However, due to activities occurring outside the ACEC, solitude would be lost due to the development of 10 wells and the harvesting of timber inside the WSA. Timber harvesting would affect solitude only during the 1 or 2 years it occurs.

In the portion of the WSA outside of the ACEC, solitude would be lost on 200 acres because of the additional disturbance and human presence associated with the development of 25 wells (disturbing 175 acres), timber harvesting on 25 acres, and OHV use.

Primitive and Unconfined Recreation

On 145 acres of the WSA inside the ACEC, primitive and unconfined recreation opportunities would be lost because of the additional disturbance and human presence associated with drilling 10 wells, timber harvesting on 75 acres, and OHV use.

On 200 acres of the WSA outside the ACEC, primitive and unconfined recreation opportunities would be lost because of the additional disturbance and human presence associated with drilling 25 wells, timber harvesting on 25 acres, and OHV use.

Hiking, sightseeing, and horseback riding would continue but the quality of the experience would be lowered because of the increased disturbance.

Special Features

Special features would be preserved in the ACEC (13,530 acres) because the physical problems associated with construction, on steep slopes and in wet areas, would limit the number of wells that would be located in the heart of the ACEC. The major objectives of the ACEC are to protect big game crucial winter habitat and the habitat for the Bonneville (Bear River) cutthroat trout. Most, if not all, of the 10 wells located in the ACEC would be located on the periphery of the ACEC. Therefore, there would be virtually no effect on the special features of the WSA.

Conclusion

Wilderness values would be lost on approximately 345 acres of the WSA due to oil and gas activities, timber harvesting, and OHV activities.

Impacts to Oil and Gas Exploration and Production

Approximately 39 billion cubic feet (BCF) of natural gas (\$51 million) would be recovered from 23 producing wells. Because of steep slopes prevalent in the area and the restrictions on exploration and development activities, these resources would likely be developed over the long term, rather than in the immediate future. Any development that takes place would likely be over several years. Therefore, the oil and gas resources recovered would be recovered over a longer period of time than the estimated 30-year production period for a single well.

Conclusion

About 39 BCF of natural gas (\$51 million) would be recovered from 23 producing wells. This compares to potential reserves in the area of secondary potential in the thrust belt covering 5,760 sections (square miles) of 14,400 BCF of gas.

Impacts to Wildlife Habitat and Populations

Seasonal stipulations restricting construction and drilling activities during the crucial winter period (November 15 to April 30) would protect big game (deer, elk, and moose) during crucial periods. There would be no effect on the Bonneville cutthroat trout because proposals for surface-disturbing activities would be required to include erosion control measures to minimize or eliminate accelerated erosion. Drilling would take place in parts of the WSA that would not increase erosion flowing into the Rock Creek drainage.

There would be 245 acres of surface disturbance in the WSA due to oil and gas activities (70 acres in the ACEC) and 100 acres disturbed due to timber harvesting (75 acres in the ACEC). Restrictions on motor vehicle use on existing roads and 25 to 30 miles of new road during the crucial period would reduce adverse impacts to big game by reducing human activities during this period. Oil and gas development would increase disturbance to native winter range for big game which inhabit the WSA during the winter (600 to 700 elk, 500 mule deer, and

RAYMOND MOUNTAIN WSA

100 to 120 moose) and increase damage to adjacent private stockyards and haystacks when the animals are displaced to these areas. However, the 245 acres of habitat lost would not affect the capability of the area to support existing big game populations.

Big game may avoid oil and gas drilling and move ½ to 1 mile away. Elk generally move a greater distance from human disturbance than do mule deer. The distance big game move is greater for a drilling well than for a producing well. In the ACEC, this distance may be reduced if it occurs on the opposite side of the drainage, as long as the activity is screened from view by intervening terrain. The displacement would not affect the capability of the area to support existing big game populations.

Big game displaced from the 345 acres disturbed due to oil and gas activities and timber harvesting would include approximately 100 elk, 75 mule deer, and 15 moose. Up to 60 percent of displaced big game may move to private lands. The effects of displacement due to oil and gas activities would be minimized by using seasonal stipulations to reduce or eliminate the amount of activity that takes place during crucial periods when the animals are subject to greater stress.

Existing yearlong 2-track trail closures in the Raymond Mountain ACEC (Raymond Canyon, White Canyon, and 2 trails off of the IGO Speedway) would minimize disturbance to wildlife by vehicles. The closure to snowmobiles would benefit elk by eliminating human presence during critical periods. Surface disturbance alone would result in no more than a 10 percent reduction in big game habitat in the WSA.

Because logging in the WSA would increase the understory, the quantity and diversity of big game browse may be increased. Because of the small acreage of forest products expected to be harvested (100 acres), and the regeneration expected to take place, the elimination of cover is not expected to adversely affect the elk. Big game would avoid the area affected by logging activities for up to 3 years after logging.

The stipulations on oil and gas leases in the ACEC would protect the habitat of the Bonneville (Bear River) cutthroat trout. The existing closure of the Raymond Canyon Trail would enhance aquatic and spawning habitat through reduced streambank erosion and reduced siltation. Habitat would continue to improve under the existing Thomas Fork Habitat Management Plan which is designed to improve riparian habitat.

Construction associated with oil and gas activity would increase the sediment and nutrient load in some drainages (e.g., Huff and Raymond Creeks) by 5 to 10 percent. Erosive areas, such as steep slopes, are precluded from field development and, therefore, would not be a major contributing factor.

Conclusion

Big game numbers in the WSA would be reduced by 10 to 20 percent. Numbers in the hunt area, of which the WSA is a part, would not be affected. Big game may be displaced, in part, onto private lands. Habitat for the Bonneville cutthroat trout would be maintained.

Impacts to Recreation Opportunities

Recreation opportunities in the WSA would remain about the same in the short term. Up to 4 wells would be drilled in the next 10 years and 10 wells in the next 20 years in the Raymond Mountain ACEC. Hikers, campers, anglers, and photographers would experience about the same quality experience as at present in the ACEC. However, the quality of the experience for these same types of recreation users outside of the ACEC would decline due to increased disturbance, human activity, and access roads.

Hunting would remain at approximately current levels for the short-term because the oil and gas wells are expected to be drilled over at least a 10-year period. As additional exploratory wells are drilled and production begins, the quality of the hunting experience would decrease. Hunter success would also decrease as big game are displaced from a larger area. This would reduce the number of hunter-days spent in the WSA by approximately 25 percent in 10 years (220 hunter-days annually).

Additional roads constructed for oil and gas exploration and development (outside the ACEC) would increase access to the WSA. This may increase opportunities for fishing but would decrease the quality of the recreation experience for most users.

The OHV seasonal limitations and 2-track trail closures would restrict OHV recreation opportunities.

Protective measures in the ACEC and the seasonal OHV closure would increase hunting opportunities after the projected 35 oil and gas are drilled production begins. Hunting opportunities would improve as a result of the seasonal closure to surface disturbance, which would minimize disturbance to wildlife during the hunting season. Oil and gas roads associated with dry holes would be closed.

Camping, associated primarily with hunting and fishing, would remain at current levels.

Conclusion

Recreational opportunities and use levels would remain about the same in the short term (5 years). Within 10 years, hunter use would decrease by about 25 percent (220 hunter-days annually). There would be no effect on motorized vehicle-dependent recre-

RAYMOND MOUNTAIN WSA

ation, including snowmobiles. Other forms of recreation use levels would not be affected, but the quality of the recreation experience would be lower for some users (e.g., picnickers, hikers, photographers, campers, anglers) due to a shift toward vehicle-oriented recreation.

Impacts on Livestock Grazing

Livestock management would not change. No new range improvements are proposed. While existing water and forage are sufficient to support current livestock numbers and practices, the flexibility for improving grazing management of the area would be greater under nonwilderness. The current grazing use of 4,800 AUMs for cattle and 9,300 AUMs for sheep would continue from May 16 to November 1.

Conclusion

Current livestock management practices would not change. The current grazing use of 4,800 AUMs for cattle and 9,300 AUMs for sheep would continue from May 16 to November 1.

Impacts to Water Quality

Water quality would continue in its present good condition. Water runoff would remain at current levels with some soil compaction and vegetation loss associated with livestock and wildlife use of riparian areas. Riparian habitat would continue to be maintained in poor condition in some areas. Under non-wilderness, stipulations would be included in oil and gas leases to protect riparian habitat. The "no surface occupancy within 1/4 mile of perennial streams" stipulation in the ACEC would help protect riparian habitat. Logging would be precluded from the Rock Creek drainage mitigating increased erosion and sedimentation in perennial streams within the ACEC. Therefore, minimal impacts to water quality would occur.

Water supplies for oil and gas activities would be provided through drilling of water wells or by trucking in water from outside the WSA. Therefore, the use of water by oil and gas operations would not affect water quality or quantity.

Conclusion

There would no impacts to water quality.

Impacts to Timber Production

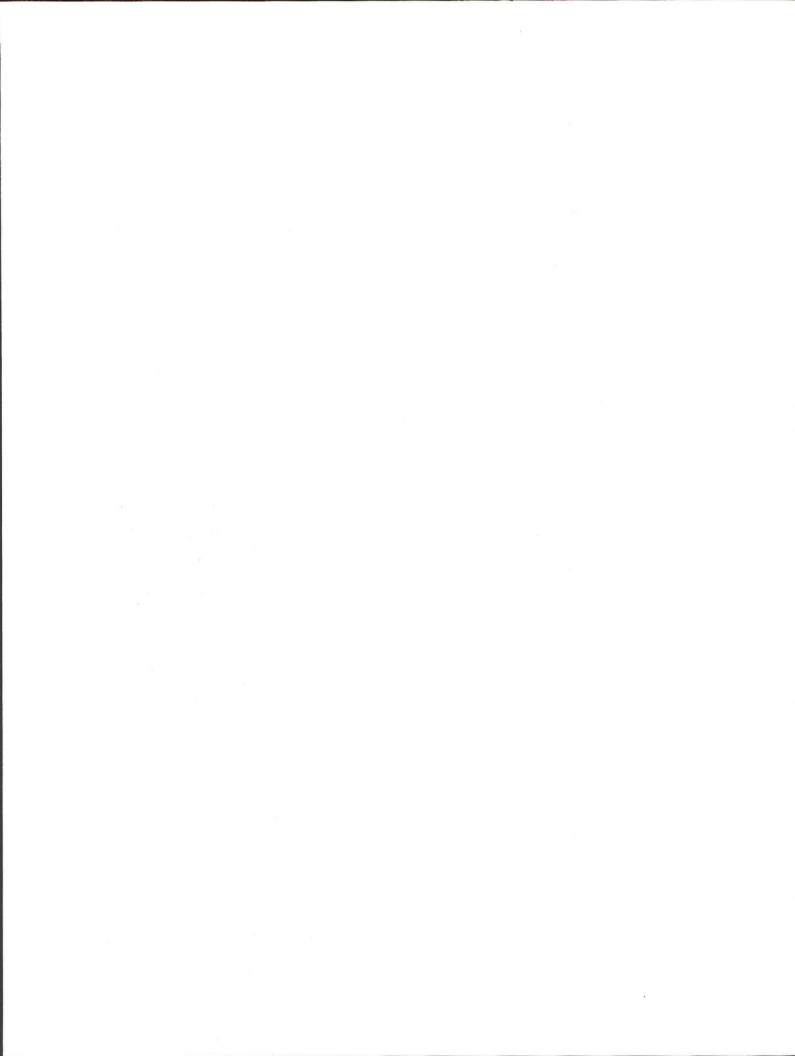
Oil and gas exploration and development activities would cause a temporary loss of vegetation. Vegetation (including forest resources), when viewed as a natural resource, would be adversely affected on 245 acres directly affected by well sites and access roads. Rehabilitation would restore grasses in 2 to 4 years and pre-existing woody vegetation in the very long term.

Approximately 100 acres of timber harvest would be allowed and public demands for forest products such as fuelwood, posts and poles, Christmas trees, and house logs would be met from the WSA. Approximately 530,000 board feet of timber and 50 acres of quaking aspen would be produced over the next 20 years. This compares to an annual production from the Bridger-Teton National Forest (which is nearby) of 20 million board feet. If these resources are made available from the WSA, neither the local demand, nor the ability of nearby resources to satisfy that demand, is expected to change.

Timber resources recovered from the WSA would include approximately 50 acres of Douglas fir (timber) and 50 acres of quaking aspen (firewood). The Douglas fir would produce approximately 530,000 board feet of forest products (26,500 board feet annually).

Conclusion

There would be 530,000 board feet of forest products harvested over the next 20 years (26,500 board feet annually). This compares to 20 million board feet harvested annually from the nearby Bridger-Teton National Forest.



BUFFALO HUMP WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Buffalo Hump WSA is in north-central Sweetwater County about 30 miles north of Rock Springs and about 13 miles southeast of Farson (Map BH-1). The WSA is approximately 5 miles long by 4 miles wide, and contains 10,300 acres of public land (Map BH-2). In the Buffalo Hump WSA, 3,072 acres are part of the 41,400-acre Greater Sand Dunes Recreation Area of Critical Environmental Concern (ACEC).

Proposed Action and Alternatives

Three alternatives were analyzed: (1) 6,080 acres of the 10,300-acre WSA would be wilderness (Proposed Action); (2) all of the 10,300-acre WSA would be wilderness (All Wilderness); and (3) none of the 10,300-acre WSA would be wilderness (No Action).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

Proposed Action (6,080 acres designated)

The Proposed Action is to designate 6,080 acres (59 percent) of the 10,300-acre Buffalo Hump WSA. The remainder of the Buffalo Hump WSA (4,220 acres) would not be designated. There are 397 acres that would receive special management under the ACEC management plan in the area not designated.

In addition, there are approximately 60 acres of State land and 160 acres of private land outside the eastern boundary of the WSA which contain wilderness values similar to the WSA. The parcels are contiguous with 580 acres of State land and 80 acres of private land on the east side of the railroad bed, adjacent to the Sand Dunes WSA. If acquired, these lands would enhance manageability of the area as wilderness.

Mineral Resources

Oil and Gas Exploration and Development

There are no pre-FLPMA oil and gas leases in the Buffalo Hump WSA. Unleased land in the area designated (6,080 acres) would not be leased.

Unleased land in the part of the Buffalo Hump WSA not designated wilderness (4,220 acres) would be offered for lease. However, no oil or gas exploration or production is anticipated because recoverable reserves are estimated as zero. New oil and gas leases issued in the area not designated would contain stipulations to protect sage grouse leks and to restrict surface disturbance within 500 feet of live water (ponds). Seasonal restrictions would be used to protect crucial wildlife habitat during important time periods. Aboveground facilities would be painted to blend with the surrounding terrain.

Solid Mineral Exploration and Development

There are no known locatable minerals; therefore, no activity is expected.

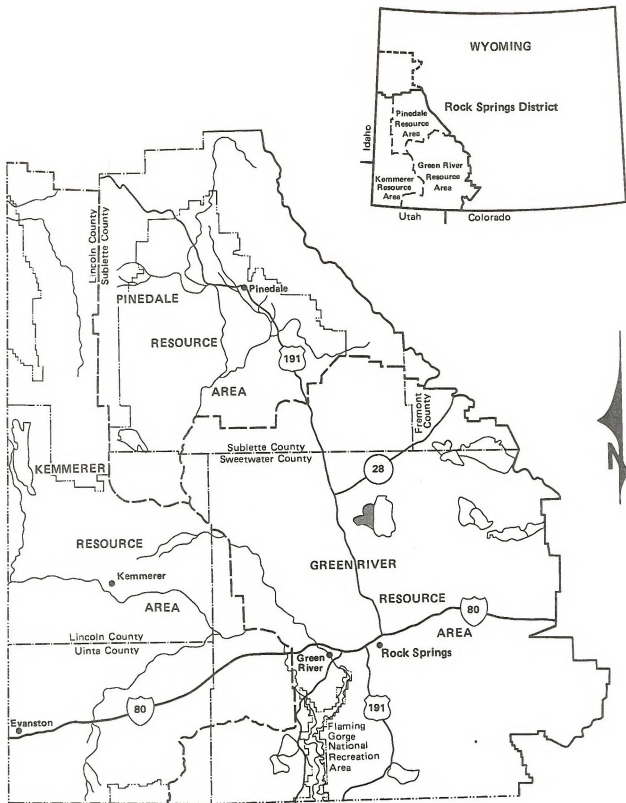
In the area designated, no activity related to salable, leasable, or locatable minerals would be allowed. The primary salable mineral would be sand. There are ample supplies available from existing sources to meet existing and anticipated needs.

In the area not designated, mineral extraction for salables would be allowed subject to surface protection and rehabilitation requirements to protect other resources. However, no such activity is anticipated because the main salable mineral in the WSA is sand, and there is sufficient availability of sand from existing sources to meet demand. No activity related to leasable solid minerals is anticipated. Activity related to locatable minerals would be allowed; however, no such activity is anticipated.

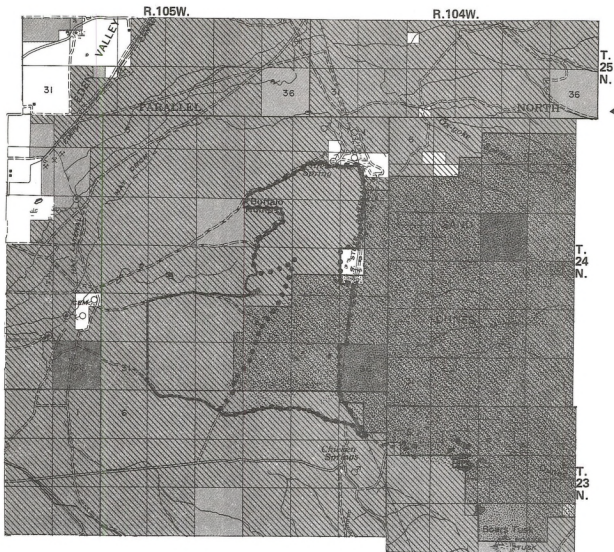
Off-Highway Vehicle Use (OHV)










The area designated (6,080 acres) would be closed to motorized vehicles. The 6.2 miles of railroad bed at the eastern boundary of the Buffalo Hump WSA would be closed to motorized vehicles. Access points would be blocked at various locations. The points where the sand would blow over the railroad bed would not be cleared.

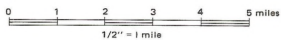
In the area not designated (4,220 acres), motorized vehicles would be limited to 5.5 miles of existing trails.



Map BH-1
BUFFALO HUMP WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



-  Wilderness Study Area Boundary
-  Proposed Wilderness Boundary
-  Proposed Action
-  Excluded Area
-  Greater Sand Dunes Recreation ACEC
-  Public Land (Administered by BLM)
-  Private Land
-  State Land
-  Federal Minerals



Map BH-2
LAND AND MINERAL STATUS
Buffalo Hump WSA

BUFFALO HUMP WSA

Recreation Use

No developments associated with recreation are anticipated in the WSA. The existing recreation use of the WSA would be approximately 50 to 100 visitor-days for nonmotorized recreation, other than hunting.

Nonmotorized hunting activities would be allowed in the area designated. Hunter use would be reduced by about 33 percent to 20 to 25 days annually for sage grouse and antelope. Hunting would be allowed but hunters using motorized vehicles would be limited to approximately 5.5 miles of existing trails in the area not designated (4,220 acres).

Grazing Use

Grazing use in the WSA (within the Pacific Creek and Sands grazing allotments) would not change as a result of wilderness designation. Within the Buffalo Hump WSA, the estimated carrying capacity of 311 AUMs for cattle and 458 AUMs for sheep would continue from May 1 to December 15. Livestock operators make up to 4 trips into the area annually using motorized vehicles.

There are 2 spring-fed potholes in the area designated which are maintained as sources for livestock water at the southern boundary of the WSA. There are several other potholes used as water sources, but routine maintenance is not performed. All of these are within 1/2 mile of the boundary of the area designated. Existing trails lead to these areas. The water sources would be maintained approximately every 5 years. Where practical alternatives are not available, the occasional use of motorized equipment to maintain range improvements could be permitted on a case-by-case basis, following an environmental analysis.

Two of the potholes in the area designated would be accessed from the railroad bed for maintenance. While the railroad bed would be closed to motorized vehicles, it is an existing trail which would be used in connection with valid existing rights.

Wildlife Habitat Management

Existing habitat would be managed to maintain existing populations of wildlife. Approximately 40 head of elk and 75 head of deer occupy the area during the summer. Approximately 200 pronghorn antelope occupy the western portions of the WSA during the winter. Surface-disturbing activities would be restricted within 500 feet from the deeper ponds (over 1 foot deep). Seasonal stipulations would be added to new oil and gas leases to protect wildlife during critical periods.

A guzzler would be constructed on the west side of the WSA to benefit sage grouse and big game. Less than 1 acre would be disturbed to construct the guzzler.

All Wilderness (10,300 acres designated)

All of the 10,300-acre Buffalo Hump WSA would be designated as wilderness. Oil and gas leasing would not resume. There would be no disturbance associated with oil and gas activities. Motorized vehicles would be prohibited in the WSA.

Mineral Resources

Oil and Gas Exploration and Development

The Buffalo Hump WSA would not be open to oil and gas leasing. There are no pre-FLPMA oil and gas leases in the Buffalo Hump WSA. Since none of the WSA would be leased, there would be no disturbance due to oil and gas exploration and development.

Solid Mineral Exploration and Development

There are no known locatable minerals; therefore, no activity is expected. No activity related to salable minerals would be allowed. If the State or private landowners decide to develop sand as a resource on part of the 220 acres of State or private land between the Buffalo Hump and Sand Dunes WSAs, access would be provided along the abandoned U.S. Steel railroad bed (if needed). However, no such activity is anticipated because the main salable mineral in the WSA is sand, and there is sufficient availability of sand from existing sources to meet demand.

Off-Highway Vehicle Use (OHV)

The 6.2 miles of railroad bed at the eastern boundary of the Buffalo Hump WSA would be closed to vehicle travel, as would the 5.5 miles of existing trails in the WSA. The points where the sand would blow over the railroad bed would not be cleared.

Recreation Use

Hunting would be allowed, but motorized vehicles would be prohibited in the WSA. There would be 20 to 25 hunter days annually for antelope and sage grouse. There would be 50 to 100 visitor-days for nonmotorized recreation other than hunting. Protection of wilderness values would be assured.

BUFFALO HUMP WSA

Grazing Use

As under the Proposed Action, grazing management practices (Pacific Creek and Sands grazing allotments) would not change from those currently in place. Within the Buffalo Hump WSA, the grazing capacity of 311 AUMs for cattle and 458 AUMs for sheep would continue from May 1 to December 15. Livestock operators make up to 4 trips into the area annually using motorized vehicles.

There are 5 spring-fed potholes used as water sources in the WSA. The 2 within ¼ mile of the southern boundary would continue to be maintained approximately every 5 years. Where practical alternatives are not available, the occasional use of motorized equipment to maintain range improvements could be permitted on a case-by-case basis following an environmental analysis.

Wildlife Habitat Management

Existing habitat would be managed to maintain existing populations of wildlife. No actions associated with wildlife management would be anticipated in the WSA. The guzzler to benefit sage grouse and big game, which would be constructed on the west side of the WSA under either of the other 2 alternatives, would not be constructed because it would have adverse effects on the naturalness of the area.

No Wilderness (No Action)

None of the 10,300-acre Buffalo Hump WSA would be designated as wilderness. Oil and gas leasing would resume but no oil or gas exploration or production is anticipated. Motorized vehicles would be limited to existing trails and possibly the 6.2 miles of railroad bed at the eastern boundary of the WSA. There would be 2 exploratory wells, resulting in 14 acres of surface disturbance. The 3,072-acre portion of the Greater Sand Dunes ACEC would continue to be managed with emphasis on recreation, wildlife habitat, and unique ecosystem values.

Mineral Resources

Oil and Gas Exploration and Development

There are no pre-FLPMA oil and gas leases in the Buffalo Hump WSA. The entire Buffalo Hump WSA would be open to oil and gas leasing. There would be 2 exploratory wells, resulting in 14 acres of surface disturbance. However, no oil or gas exploration or production is anticipated because recoverable reserves are estimated as zero. New oil and gas leases would be conditioned to prevent disturbance to sage

grouse leks and to restrict disturbance within 500 feet of live water (ponds). Seasonal stipulations would be applied to oil and gas leases in the WSA to protect crucial wildlife habitat during important time periods. Aboveground facilities would be painted to blend with the surrounding terrain.

Solid Mineral Exploration and Development

There are no known locatable minerals; therefore, no activity is expected. Mineral extraction for salables would be allowed subject to surface protection and rehabilitation requirements to protect other resources. However, no such activity is anticipated because the salable mineral of concern in the WSA is sand, and there are ample reserves available from existing sources to meet present and anticipated demands. No activity related to locatable or leaseable minerals is anticipated because there are no known locatable or leaseable minerals in the WSA.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be limited to 5.5 miles of existing roads and trails and the 1 mile of access road to the 2 exploratory well sites. Generally, new roads would not be allowed within 500 feet of live water. There would be 350 to 400 visitor-days spent annually in the WSA using OHVs.

The 6.2 miles of railroad bed on the eastern boundary of the Buffalo Hump WSA would be closed to motorized vehicles unless both the Buffalo Hump and Sand Dunes WSAs are not designated wilderness.

Recreation Use

Hunting would be allowed; however, motorized vehicles would be limited to 5.5 miles of existing trails, 1 mile of new access road to the 2 wells sites, and the 6.2 miles of railroad bed at the eastern boundary of the WSA (if the Sand Dunes WSA is also not designated). Approximately 150 to 200 visitor-days using motorized vehicles would use the railroad bed to access areas north of the WSA. There would be 100 to 150 visitor-days spent annually for nonmotorized recreation other than hunting. There would be 35 to 40 visitor-days annually spent in the WSA for hunting antelope and sage grouse.

No developments associated with recreation are anticipated in the WSA. The existing recreation use of the WSA (hiking, hunting, and photography) would remain the same. There would be approximately 21 hunter-days annually for pronghorn antelope and 15 hunter-days annually for sage grouse. There would be approximately 100 to 150 visitor-days for nonmotorized recreation other than hunting.

BUFFALO HUMP WSA

Grazing Use

Grazing management practices (Pacific Creek and Sands grazing allotments) would not change from those currently in place. Within the Buffalo Hump WSA, the estimated carrying capacity of 311 AUMs for cattle and 458 AUMs for sheep would continue from May 1 to December 14. There are 5 spring-fed potholes that serve as sources for livestock water in the WSA. Two of these are currently maintained every 5 years. This maintenance would continue. The use of motorized vehicles in support of livestock management activities (four trips annually) would be limited to existing roads and trails.

Wildlife Habitat Management

A guzzler would be constructed on the western side of the WSA to benefit sage grouse and big game. Oil and gas operators would be required to reclaim areas no longer needed for oil and gas exploration and production. However, no such activities are anticipated because no known recoverable reserves exist in the WSA. No actions would be taken to compensate for any habitat that may be lost as a result of oil and gas activities.

CHAPTER II - Affected Environment

Introduction

The dominant use of the Buffalo Hump WSA (Map BH-2) is for grazing, with some trailing for both cattle and sheep. The southern and eastern portions of the WSA receive primitive recreation use, while OHV use and hunting occur mostly on the north and west portions of the WSA.

Vegetation ranges from climax stands of big sagebrush and greasewood on the north and west, to active sand dunes and meadows on the east and south. The primary topographic relief consists of many sand valleys, blowouts, dunes, and hills which occur in the southern and eastern portions of the WSA. Individual sand dunes exceed heights of 100 feet. Interdunal areas on the northern and western portions contain ponds, grass-covered marshes, and playas. The area exhibits geologic processes and vegetative succession as a mature ecosystem. The area contains valuable big game habitat (elk, mule deer, and pronghorn antelope).

There are 3,072 acres in the Buffalo Hump WSA that are also in the 41,400-acre Greater Sand Dunes

ACEC (Map BH-2). The portion of the ACEC in the Buffalo Hump WSA is managed primarily for wildlife values and values associated with the unique ecosystem of the ACEC.

An abandoned U.S. Steel railroad bed forms the eastern boundary of the WSA. This railroad bed forms part of the common boundary between the Buffalo Hump and Sand Dunes WSAs. The rails were removed from the railroad bed in 1986, leaving a gravel surface suitable for some motorized vehicles. There are places where the sand covers the bed. The railroad bridge at the Pacific Creek crossing near Highway 28 was removed, making a trip along the entire length of the bed impossible. There are no arrangements for maintaining the surface in a condition safe for motorized vehicle use. The right-of-way holder plans on relinquishing the right-of-way.

Wilderness Values

The 10,300-acre Buffalo Hump WSA meets the criteria established in Section 2(c) of the Wilderness Act. It is comprised entirely of public lands.

Naturalness

This WSA is essentially in a natural condition exhibiting an undisturbed sagebrush-grassland ecosystem intermingled with active sand dunes. Intrusions consist of 5 two-track trails and 1 seismograph line for a total of 5.5 miles; 1 segment of sand fence; and 2 livestock reservoirs. The 2-track trails are faint, overgrown with vegetation, and dead end after short distances or connect with boundary roads. Two spring-fed ponds, which are maintained as livestock reservoirs, are along the southern boundary road. They are considered to have only minor impact on the integrity of the WSA.

The railroad bed is about 3 to 5 feet above ground level. From a short distance away, the gravel bed is not visible because it is below the dunes over most of its length. A visitor looking east from the WSA would see the Sand Dunes WSA. The railroad bed is used by 4-wheel-drive and some 2-wheel-drive vehicles. Some ponds have developed from borrow pits excavated during construction of the railroad. However, they appear natural and are in the process of filling in through natural sand and soil erosion.

Solitude

The remoteness of the area and the dunes provide ample solitude, especially in the southern and eastern portions of the WSA due to topographic relief.

BUFFALO HUMP WSA

The Sand Dunes WSA, to the east, adds to the solitude of the area.

Primitive and Unconfined Recreation

The best opportunities for primitive and unconfined recreation can also be found in the southern and eastern portions of the WSA. These include hiking, backpacking, camping, bird-watching, wildlife photography, horseback riding, and hunting (approximately 125 to 200 visitor-days annually).

Special Features

Ecological and cultural values are also found in the WSA. The varied species of small animals in the WSA make it a pleasant day trip for a casual observer and a good educational experience for those interested in a unique ecosystem. Ecologically, the WSA is typical of a sagebrush-bunchgrass ecosystem featuring gently rolling, sagebrush-covered sand hills, with some active barren sand dunes. This area attracts wild horses, mule deer, a unique desert elk herd (the Sands elk herd), large numbers of pronghorn antelope, and many species of birds, including waterfowl. Small mammals, including several Ord kangaroo rats and several species of mice, are also found in the WSA as are spadefoot toads. Tiger salamanders are associated with the small ponds. During years when both snowfall and spring rainfall are low, the ponds may dry up. However, when this occurs, the former pond areas are vegetated with a good cover of grasses. Raptors and coyotes are frequent visitors to the area. There have been reports of mountain lion sightings.

Mineral Resources

The most probable recoverable reserves estimated to exist within the 10,300-acre WSA is zero. The maximum recoverable reserves estimated to exist in the WSA is 53.5 billion cubic feet (BCF) of gas, based on an average for the Green River Basin as a whole. This estimate was calculated from figures in the "Wyoming Geological Association Guidebook, Greater Green River Basin Symposium" (WGA 1973). In that study, it was estimated there is 3.32 BCF of recoverable gas per 640 acres in the Green River Basin (15,046 square miles). This indicates total recoverable reserves in the Green River Basin of about 50,000 BCF of gas. The Green River Basin includes almost all of Sublette County, significant portions of Sweetwater and Uinta counties,

and parts of Lincoln, Carbon, and Fremont counties. The estimate does not apply uniformly throughout the Green River Basin. Based on drilling history and current information on the geology associated with the Buffalo Hump WSA, no recoverable reserves are known to exist beneath the WSA.

There are no pre-FLPMA leases. There is 1 dry hole within the WSA in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of section 22, T. 24 N., R. 105 W. The well tested the Ericson Member of the Mesaverde Formation to a depth of 7,997 feet. No results were reported in this 1971 wildcat test.

Sand is available in abundance in the WSA. Because existing sources are adequate to meet current and anticipated demands, mining of sand from the WSA is not anticipated.

Wildlife

Valuable habitat for big game is found in the WSA. Elk (approximately 40 resident head) and mule deer (approximately 75 head) occupy the area during the summer, using the freshwater ponds, and Fifteen Mile Spring on the edge of the WSA. These animals linger in the area during the hunting season, using the broken topography and relative inaccessibility to their advantage. Deer may use the area during the winter, but elk generally migrate to the east during the winter. About 200 pronghorn antelope move from their summer range, north of the WSA, onto western parts of the WSA for the winter.

The Buffalo Hump WSA (10,300 acres) constitutes 0.5 percent of the 1,999,076-acre Steamboat elk hunt area; 0.8 percent of the 1,295,248-acre Steamboat mule deer hunt area; and 1.2 percent of the 858,181-acre Eden pronghorn antelope hunt area.

Raptor habitat in the Buffalo Hump WSA is limited, due to a general absence of suitable nesting sites. The 1981 raptor inventories in the WSA located 3 nests: 1 golden eagle nest on Buffalo Hump and 2 ferruginous hawk nests.

Red foxes and coyotes use the WSA. Red fox habitat is generally limited to the western and northern portions of the WSA. Coyotes are common throughout the WSA. Bobcats also use the area; however, their occurrence is not considered common.

Several freshwater ponds are found in lower elevations in the eastern portion of the WSA. They range in depth from a few inches to 3 feet. Waterfowl use this habitat for breeding. This habitat could support up to 50 ducklings annually. Other waterfowl and shorebirds include white-faced ibis, killdeer, snowy plover, sandpipers, sage grouse, avocets, and common wading birds. The sage grouse is a common upland game bird associated with the WSA.

BUFFALO HUMP WSA

Hummingbirds arrive in the WSA in early August and leave for southerly climates by late August. Migrating passerine birds also increase in number around the ponds in late summer and early fall. Spadefoot toads, tiger salamanders, and wandering garden snakes are common amphibians and reptiles. There are no fish in the ponds. Pocket mice, white-footed mice, and Ord kangaroo rats are also found in the WSA.

No prairie dog towns were observed in a 1982 aerial survey. There is no documented occurrence of bald eagles, peregrine falcons, or whooping cranes. There is no habitat for the Colorado squawfish or the humpback chub in the Buffalo Hump WSA.

Recreation Opportunities

Estimates of use for the hunt areas in which the Buffalo Hump WSA (10,300 acres) is located include 229 hunter-days in the 1,999,078-acre Steamboat elk hunt area; 1,832 hunter-days in the 1,295,248-acre Steamboat mule deer hunt area; and 2,097 hunter-days in the Eden pronghorn antelope hunt area. The hunter use in the Buffalo Hump WSA is for antelope (21 hunter-days annually) and sage grouse (15 hunter-days annually).

The abandoned U.S. Steel railroad bed is used by visitors to access the northern portions of the WSA. Approximately 100 to 150 visitor-days are spent in the Buffalo Hump WSA from this access point. About 10 to 15 of these visitor-days involve off-highway vehicle recreation. Approximately 25 to 50 visitor-days are spent from other access points. Approximately 150 to 200 visitor-days are spent by individuals using the railroad bed to access other areas north of the WSA. For example, there is good sage grouse habitat near the railroad bed several miles north of the WSA. When the railroad was working, this habitat was not hunted. The removal of the rails created access which opened the area to sage grouse hunting both from the south (Rock Springs) and from the north (Farson).

There is some recreation use (approximately 50 visitor-days annually) for rockhounding in the northern portion of the WSA. This use is primarily for agatized wood.

Livestock Grazing

Livestock grazing in the Buffalo Hump WSA is primarily for cattle but also includes some sheep use. Natural ponds serve as dependable sources of livestock water. The WSA includes parts of 2 grazing allotments, Pacific Creek and Sands allotments.

These allotments provide 311 AUMs for cattle and 458 AUMs for sheep. There are 5 spring-fed potholes that serve as sources of livestock water. Two of these potholes, near the southern boundary road, are maintained every 5 years (2 to 4 vehicle use days per maintenance operation). The remaining 3 are used for livestock water but they are not maintained. Most potholes are within 1/2 mile of the boundary of the area proposed for designation under the Proposed Action.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of environmental impacts for the Proposed Action, All Wilderness, and No Wilderness Alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-3 summarizes the impacts by alternative.

Proposed Action and Alternatives

Proposed Action (6,080 acres designated)

The Proposed Action is to designate 6,080 acres of the 10,300-acre Buffalo Hump WSA as wilderness. There would be no oil and gas leases issued in the area designated and no surface disturbance associated with oil and gas exploration and development. Motorized vehicles would be prohibited in the 6,080 acres designated. The railroad bed along the eastern boundary of the WSA would be closed to motorized vehicles.

If acquired, an additional 60 acres of State land and 160 acres of private land on the west side of the railroad bed could be designated wilderness. These lands would improve the manageability of the wilderness area and provide a more easily defined wilderness boundary.

**TABLE 2-3
SUMMARY OF IMPACTS BUFFALO HUMP WSA**

	Proposed Action (Partial Designation)	Alternative A (All Wilderness)	Alternative B (No Wilderness)
Public Lands Designated	6,080 acres (59%)	10,300 acres (100%)	0 acres (0%)
Other Lands	60 acres of State and 160 acres private outside WSA would be added, if acquired.	60 acres of State and 160 acres private outside WSA would be added, if acquired.	None
Area of Critical Environmental Concern (ACEC)	3,072 acres of area designated in the 41,400-acre Greater Sand Dunes ACEC.	3,072 acres of the WSA in the 41,400-acre Greater Sand Dunes ACEC.	3,072 acres of the WSA in the 41,400-acre Greater Sand Dunes ACEC.
Wilderness Values			
Naturalness	Naturalness protected on 6,080 acres. No effects to naturalness expected on the remaining 4,220 acres.	Naturalness protected in the entire 10,300-acre WSA.	Naturalness lost for the short term on 14 acres due to 2 exploratory oil and gas wells.
Solitude	Solitude protected on 6,080 acres. Closure of the railroad bed would reduce motorized vehicles by 250 to 350 trips annually enhancing solitude in the remaining 4,220 acres.	Solitude protected in the entire 10,300-acre WSA.	Solitude lost within 1/4-mile of 2 oil and gas wells for 1 year. OHV use would reduce solitude along the railroad bed, resulting in a loss in solitude in half the WSA.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation protected on 6,080 acres. Closure of the railroad bed would reduce motorized vehicles by 250 to 350 trips annually enhancing opportunities for primitive recreation in the remaining 4,220 acres.	Opportunities for primitive and unconfined recreation protected in the entire 10,300-acre WSA.	OHV use would reduce opportunities for primitive and unconfined recreation along the railroad bed, resulting in a loss in these opportunities in half the WSA.
Special Features	Special features protected in the entire 10,300-acre WSA, including the values of 3,072 acres in the ACEC.	Special features protected in the entire 10,300-acre WSA, including the values of 3,072 acres in the ACEC.	Special features in the WSA would be mostly protected; however, motorized vehicle use may result in waterfowl abandoning the ponds near more heavily used areas.

TABLE 2-3 (Continued)
SUMMARY OF IMPACTS BUFFALO HUMP WSA

	Proposed Action (Partial Designation)	Alternative A (All Wilderness)	Alternative B (No Wilderness)
Minerals			
Oil and Gas	No oil and gas resources recovered or foregone from the WSA.	No oil and gas resources recovered or foregone from the WSA.	No oil and gas resources recovered or foregone from the WSA.
Wells in WSA Not Designated	0	0	2
Surface Disturbance in WSA Not Designated	0 acres	0 acres	14 acres
Solid Minerals	No potential	No potential	No potential
Wildlife Habitat and Populations	<p>Minimal impacts to wildlife because disturbance is expected to be minimal. Railroad bed at the eastern boundary closed (6.2 miles) to vehicle travel; therefore, disturbance from OHVs would be limited.</p> <p>Motor vehicle trips would be reduced by 250 to 350 annually. Wildlife habitat would be enhanced.</p>	<p>Minimal impacts to wildlife because disturbance would not occur. Railroad bed at the eastern boundary (6.2 miles) closed to motorized vehicles; therefore, disturbance from OHVs would be limited.</p> <p>Motor vehicle trips would be reduced by 250 to 350 annually. Wildlife habitat would be enhanced.</p>	<p>Minimal impacts to wildlife because no oil and gas production is expected.</p> <p>Railroad bed at the eastern boundary of the WSA open to vehicle travel (rails and ties have been removed). Motor vehicle activity expected to increase by 150 visitor-days annually. This would result in avoidance by big be direct disturbance of some ponds near the railroad bed.</p>
Recreation Opportunities	<p>Little or no effect on recreation opportunities. Current use of the WSA for recreation is limited. OHV use and hunting are the primary recreation activities. These could be accommodated in nearby areas.</p>	<p>Little or no effect on recreation opportunities. Current use of the WSA for recreation is limited. OHV use and hunting are the primary recreation activities. These could nearby areas.</p>	<p>Little or no effect on recreation opportunities because of the abundant opportunities for hunting and OHV recreation in nearby areas.</p>

TABLE 2-3 (Continued)
SUMMARY OF IMPACTS BUFFALO HUMP WSA

	Proposed Action (Partial Designation)	Alternative A (All Wilderness)	Alternative B (No Wilderness)
Recreation Opportunities (Continued)	There would be 250 to 350 visitor-days lost due to closure of railroad bed. About half of the use would be displaced rather than lost.	There would be 250 to 350 visitor-days lost due to closure of railroad bed. About half of the use would be displaced rather than lost.	There would be an increase in visitor use of 150 visitor-days annually.
Livestock Grazing	<p>15 hunter-days would be lost annually for sage grouse and antelope in the WSA.</p> <p>Restrictions on motorized vehicle use may occasionally inconvenience livestock operators.</p> <p>Livestock numbers would not be affected.</p> <p>Exclusion of recreation OHV use would benefit livestock by reducing harassment and preventing damage to water sources.</p> <p>Two existing water sources would be maintained every 5 years.</p>	<p>15 hunter-days would be lost annually for sage grouse and antelope in the WSA.</p> <p>Restrictions on motorized vehicle use may occasionally inconvenience livestock operators.</p> <p>Livestock numbers would not be affected.</p> <p>Exclusion of recreation OHV use would benefit livestock by reducing harassment and preventing damage to water sources.</p> <p>Two existing water sources would be maintained every 5 years.</p>	<p>Current level of 15 hunter-days for sage grouse would be retained.</p> <p>Livestock operators would be allowed to use motorized vehicles.</p> <p>Livestock numbers would not be affected.</p> <p>Increased use of recreational OHVs may harass livestock and damage water sources.</p> <p>Two existing water sources would be maintained every 5 years.</p>

BUFFALO HUMP WSA

BUFFALO HUMP WSA

Impacts to Wilderness Values

Naturalness

Closing of the railroad bed and the area designated to motor vehicle use would help to preserve naturalness. It would reduce the number of trips into the area using motorized vehicles by 250 to 350 trips annually. Motorized vehicle use associated with range management activities would be primarily to maintain 2 existing potholes as water sources every 5 years. Generally, both potholes would be maintained in the same year, confining maintenance activities to that year. Shifting sands would quickly cover any adverse impacts to naturalness caused by motorized vehicles in the WSA to carry out maintenance activities. Naturalness would not be affected in the long term.

Naturalness would remain about the same in the area not designated. Virtually all the traffic entering the area is from the south, on the road which forms the southern boundary of the area designated and on the railroad bed. Little use is evident on trails in the area and the trails are quickly covered by blowing and shifting sand, so they do not remain as long-term evidence of alteration by people.

Solitude

Closing of the railroad bed (at the eastern boundary of the WSA) and the area designated to motor vehicle use would help to preserve solitude. Motorized vehicle use associated with range management activities would be infrequent. It would disrupt solitude on only 2 to 3 days annually.

Virtually all the traffic entering the area is from the south, on the road which forms the southern boundary of the area designated and on the railroad bed. There would be a reduction of about 250 to 350 motor vehicle trips annually into or through the area. This would result in improvements in solitude in the area not designated as well as the area designated. Since no oil and gas activity or other mineral activity is anticipated, no loss in wilderness values would occur due to these actions. Motorized vehicle use associated with range management activities would be infrequent. Maintenance of range improvements would adversely affect solitude in the area not designated. However, the frequency of these activities is much lower than other motorized vehicle activity. Therefore, it is not expected to substantially increase impacts on solitude.

Primitive and Unconfined Recreation

The opportunities for primitive and unconfined recreation would be preserved in the area desig-

nated because of the elimination of motorized vehicles. However, motorized vehicles would be allowed on existing roads and trails in the area not designated. This would result in a loss of the opportunity for primitive and unconfined recreation in the area not designated.

Special Features

The special features associated with the ponds in the WSA would not be adversely affected. There would be no oil and gas activity near any of the ponds, and motorized vehicles would be prohibited in the vicinity of the ponds. This would protect the ponds that are frequently associated with birdwatching.

Conclusion

All wilderness values would be protected in the part of the WSA designated (6,080 acres). Values associated with wildlife observation would be enhanced because motorized vehicles would be eliminated on the railroad bed. Wilderness values would be diminished on 4,220 acres, but these values would not be lost because a reduction of 250 to 350 motor vehicle trips annually into or through the area due to the closure of the railroad bed.

Impacts to Oil and Gas Exploration and Production

Unleased lands in the area designated (6,080 acres) would not be leased. The opportunity to explore for oil and gas would be lost on this 6,080 acres. However, it is unlikely that any production would be foregone because there are no known recoverable reserves of oil and gas in the WSA.

Unleased lands in the area not designated (4,220 acres) would be available for lease. No oil and gas resources would be recovered from the WSA. Current information does not indicate a potential for the occurrence of oil and gas.

Conclusion

The opportunity to explore for oil and gas resources on 6,080 acres would be lost. However, no production would be foregone because there are no known recoverable reserves of oil and gas in the WSA. The opportunity to explore for oil and gas would be available on the remaining 4,220 acres in the WSA but no exploration or production is anticipated.

Impacts to Wildlife Habitat and Populations

The elimination of motor vehicle use in the area designated (6,080 acres) would decrease the disturbance to wildlife, resulting in an improvement in habitat effectiveness on the 6,080 acres. The animals would not avoid the area due to disturbances caused by vehicles. The elimination of motor vehicles from the WSA and the railroad bed would result in an estimated reduction of 250 to 350 vehicle trips annually. Human activity and noise would be reduced, lessening displacement from the area by big game.

Big game numbers would not be affected because the area designated wilderness constitutes only a small portion of each species hunt area (0.3 percent for elk; 0.5 percent for deer; and 0.7 percent for antelope).

Motorized vehicle activity would continue to cause big game to avoid the western portion of the WSA (4,220 acres). Big game would avoid the area during periods of human and motorized vehicle activity. Existing trails in the remainder of the area would be used occasionally and at very low levels, rarely more than 4 to 5 vehicles on some days (and frequently none). This disturbance is not expected to affect big game numbers because the area not designated constitutes only a small portion of each species hunt area (0.2 percent for elk; 0.3 percent for deer; and 0.5 percent for antelope).

A guzzler would be installed primarily to benefit elk. This would reduce stress from lack of water and improve summer survival. It would also increase survival for sage grouse chicks.

Conclusion

The number of motorized vehicle trips into or through the area would be reduced by 250 to 350 annually, enabling the WSA to provide better habitat for big game and reducing the effects of big game avoiding the area because of the disturbance caused by motorized vehicles. Big game numbers would remain at current levels (200 antelope, 40 elk, and 75 mule deer).

Impacts to Recreation Opportunities

Since virtually all of the hunter-days spent in the area designated are for antelope and sage grouse, and the area designated is relatively small (6,080 acres), the number of hunter-days is expected to be reduced from 21 to 12 annually for antelope and from 15 to 10 annually for sage grouse. The number of hunters who pass through the WSA, driving from Rock Springs, to hunt north of the WSA, would be reduced by about 50 visitor-days annually. There is

occasional OHV activity in the WSA (10 to 15 visitor-days annually). This use would be eliminated. The number of OHV users coming into the area from adjacent areas would be reduced with a more intensive program of signing to inform the public about the wilderness area and its restrictions. There would be a loss of approximately 50 to 100 visitor-days spent in the WSA (primarily for hiking and photography). Individuals who use the railroad bed to access areas north of the WSA (150 to 200) would have to utilize other routes. About half of these individuals would use other available access points. The other half would not visit the WSA.

There is currently motorized vehicle activity in the area not designated. Use would continue at current levels. The recreation opportunities in the area not designated would be reduced by about 25 visitor-days annually, primarily because of the closure of motorized vehicle access using the railroad bed.

The loss of about 250-350 visitor-days in the WSA is mostly due to the closure of the railroad bed to motorized vehicles. This impact is relatively minor because approximately 75 percent of the use would be displaced rather than lost. Most of the impact is due to the loss of the public's ability to use the railroad bed for vehicle travel. The railroad bed has been available for use by the public since removal of the rails in 1986. Therefore, a displacement would change short-term rather than long-term use patterns.

Conclusion

There would be a loss of about 250-350 visitor-days in the WSA, mostly due to the closure of the railroad bed to motorized vehicles. At least half of the use would be displaced rather than lost. There would be a displacement of approximately 15 hunter-days annually for sage grouse and antelope from the WSA.

Impacts to Livestock Grazing

The existing level of 311 AUMs for cattle and 448 AUMs for sheep would be maintained. The 2 existing water sources at the southern boundary of the area designated (less than ¼ mile within the boundary) would be maintained approximately every 5 years using motorized vehicles. Livestock operators would continue to make 4 trips annually into the area to check on livestock (using a pickup truck or similar vehicle) on existing trails. Therefore, livestock operators would not be adversely affected. Generally, livestock management activities could be handled without using motorized vehicles in the area designated. In years when snowfall and spring rains are low, no amount of maintenance of the potholes would help to maintain them as sources of livestock water.

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The exclusion of recreational motorized vehicles would reduce occurrences of livestock harassment. It would also keep recreational motorized vehicles farther away from the potholes. This would reduce the potential for these vehicles to damage the potholes, requiring additional maintenance by livestock operators.

Conclusion

The existing level of 311 AUMs for cattle and 448 AUMs for sheep would be maintained. Livestock management practices would not be affected. The exclusion of recreational motorized vehicles would benefit livestock grazing by reducing harassment and preventing damage to water sources.

Unavoidable Adverse Impacts

Approximately 250 to 300 visitor-days annually for recreation and 15 hunter-days annually for sage grouse would be lost in the WSA. There would be no other unavoidable adverse impacts.

Irreversible and Irrecoverable Commitments of Resources

There would be no irreversible or irretrievable commitment of resources.

Short-Term Uses versus Long-Term Productivity

The long-term productivity of the WSA would be maintained.

All Wilderness (10,300 acres designated)

All of the 10,300-acre Buffalo Hump WSA would be designated as wilderness. There would be no oil and gas leases issued in the WSA and no surface disturbance associated with oil and gas activities. Motorized vehicles would be prohibited in the WSA, as well as on the 6.2 miles of railroad bed at the eastern boundary of the WSA.

Impacts to Wilderness Values

Naturalness

Naturalness would be protected in the entire WSA (10,300 acres). The wilderness characteristics would essentially remain the same. Oil and gas activities would not occur. The closure of the railroad bed to motorized vehicles would help preserve naturalness in the WSA because the lack of access on the east side of the WSA would reduce the intrusions caused by unauthorized OHVs entering the WSA from the railroad bed.

Solitude

Solitude would be protected in the entire WSA (10,300 acres). The wilderness characteristics would essentially remain the same. Oil and gas activities would not occur. The closure of the railroad bed to motorized vehicles would help preserve solitude in the WSA by eliminating noise from motorized vehicles.

Primitive and Unconfined Recreation

The elimination of motorized vehicles from the WSA and the railroad bed would improve the opportunities for primitive and unconfined recreation by eliminating the intrusions to solitude caused by motorized vehicles. This would enrich the recreational experience for those interested in primitive and unconfined recreation.

Special Features

Special features associated with the dunes, pools, and diverse animal life would be protected in the entire WSA (10,300 acres). Oil and gas activities would not occur. The closure of the railroad bed to motorized vehicles would help to minimize the amount of OHV-related disturbance around the pools and partially stabilized dunes near the railroad bed.

Conclusion

Naturalness, solitude, and opportunities for primitive and unconfined recreation would be protected on 10,300 acres.

Impacts to Oil and Gas Exploration and Production

No oil and gas leases would be offered and no oil and gas resources would be recovered from the WSA. The opportunity to explore for oil and gas resources would be lost on 10,300 acres. Current information indicates there is a low potential for production of oil and gas.

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Conclusion

The opportunity to explore for oil and gas would be lost on 10,300 acres. There would be no oil and gas production from the WSA. However, no oil and gas production would be foregone.

Impacts to Wildlife Habitat and Populations

The elimination of motor vehicle use, especially on the 6.2 miles of railroad bed at the eastern boundary of the WSA, would decrease the disturbance to wildlife, resulting in reduced displacement of animals and increased habitat effectiveness. In the short term, big game populations would move into the area from adjacent areas. But big game numbers are not expected to change because the entire WSA constitutes a small percentage of the hunt area for each species (0.5 percent for elk; 0.8 percent for deer; and 1.2 percent for antelope). The disturbance to raptors would also decrease, but due to limited habitat, raptors would not increase in number.

Conclusion

There would be no disturbance due to oil and gas activities, nor from motorized vehicle use, as the railroad bed at the eastern boundary of the WSA would be closed. Big game numbers would remain at current levels (200 antelope, 40 elk, and 75 mule deer).

Impacts to Recreation Opportunities

Since virtually all of the hunter-days spent in the WSA are for antelope and sage grouse, hunter-days are expected to be reduced by 10 hunter-days for antelope and 5 hunter-days for sage grouse. There are approximately 10 to 15 visitor-days spent in the WSA for off-highway vehicle recreation. The number of OHV users coming into the area from the adjacent areas is not expected to change but may be reduced with a more intensive program of signing to tell the public about the wilderness area and its restrictions. There would be a loss of 100 to 150 visitor-days (primarily for hiking and photography) by individuals who use the railroad bed for access to the WSA. Individuals who use the railroad bed to access areas north of the WSA (150 to 200) would have to find other routes. About half of these individuals would use other available access points. The other half would not visit the WSA. Visitor use, primarily for hiking, for users who use access points other than the railroad bed would be reduced by about 50 percent (25 visitor-days annually).

Conclusion

There would be a loss of 250 to 350 visitor-days annually (associated with motorized vehicles). Due to the abundant availability of similar kinds of opportunities in the vicinity of the WSA, these uses would be accommodated in nearby areas. Opportunities for wilderness type recreation would be enhanced.

Impacts to Livestock Grazing

The existing level of 311 AUMs for cattle and 448 AUMs for sheep would be maintained. The 2 spring-fed potholes which serve as livestock water sources within ¼ mile of the southern boundary of the WSA (which are currently maintained) would continue to be maintained approximately every 5 years using motorized vehicles. Livestock operators would continue to make 4 trips annually into the WSA (using a pickup truck or similar vehicle) to check on livestock. These trips would be along existing trails. Generally, livestock management activities could be handled without using motorized vehicles in the area designated. The exclusion of recreational motorized vehicles may reduce occurrences where livestock are harassed. It would also keep recreational motorized vehicles farther away from the potholes, reducing the potential for them to reduce the potholes' utility to serve as sources for livestock water.

Conclusion

The existing level of 311 AUMs for cattle and 448 AUMs for sheep would be maintained. Livestock management practices would not change. The exclusion of recreational motorized vehicles may benefit livestock grazing by reducing harassment and preventing damage to water sources, requiring additional maintenance of those water sources.

No Wilderness (No Action)

None of the 10,300-acre Buffalo Hump WSA would be designated as wilderness. Oil and gas leasing would resume. Motorized vehicles would be limited to existing roads and trails.

Impacts to Wilderness Values

Naturainess

The WSA would not be afforded statutory protection. The 2 oil and gas wells drilled in the northern and southern parts of the area recommended under

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the Proposed Action would be located so that they would not adversely impact any of the spring-fed ponds. The wells are not anticipated to be producers. Therefore, they would be reclaimed in the same year they are drilled. Naturalness would be lost on the 7 acres for each well site and access road for 3 to 5 years. At that point, the shifting sands would cover the drill pads, and naturalness would return.

The nature of the area, with shifting and blowing sand, would make disturbances due to OHVs unnoticeable after a few days in most of the WSA. For this reason, the limited designation for OHVs is not expected to adversely affect naturalness except around the ponds or immediately around the railroad bed where most OHVs are expected to access the WSA.

The use of motorized vehicles in connection with range management activities would be occasional and would not affect naturalness and would only affect solitude for a short period of time for 2 days annually. The occasional use would not result in existing trails becoming more visible. There would be additional use for several days 1 out of every 5 years to maintain the 2 spring-fed potholes that are currently maintained.

Solitude

Solitude would be lost for up to ¼ mile around the 2 exploratory oil and gas wells for 1 year, during construction and drilling. Motorized vehicles would be limited to existing trails. They would be allowed to use the railroad bed if neither the Buffalo Hump nor the Sand Dunes WSA is designated. Due to the noise from recreational OHVs, solitude would be lost in the entire WSA during the summer when use of OHVs in the WSA is highest. During the winter, when OHV use is low, solitude would continue to be present in the WSA.

Primitive and Unconfined Recreation

The opportunities for primitive and unconfined recreation would be lost in the entire WSA because motorized vehicles would use the WSA. The opportunity would still be present during the colder months when OHV activity is low. But these are the same times when the use of the WSA for primitive and unconfined recreation would be low. These would detract from the natural, remote nature of the area and the enjoyment of a primitive recreational experience.

Special Features

The 2 exploratory oil and gas well that would be drilled in the WSA would not affect special features

because the stipulations that would be placed on oil and gas leases in the WSA would be adequate to mitigate the potential adverse impacts to the special features of the WSA. The use of motorized vehicles in connection with range management activities would be occasional and would not affect solitude except for the short period of time. These activities would probably not be necessary every year. The occasional use would not result in existing trails becoming more visible.

Most of the disturbance in the WSA would be due to motorized vehicles entering the WSA from the railroad bed. This would result in short-term adverse impacts to the values of naturalness and solitude. The increase of 150 visitor-days annually would be due to the railroad bed remaining open to motorized vehicles and would result in an adverse impact to solitude in the WSA. Since the railroad bed forms the eastern boundary of the WSA, the adverse effects in solitude are expected to be large.

There would be a loss in special features as birds and other wildlife would be displaced near the railroad bed. Individuals utilizing the railroad bed to access the Buffalo Hump or Sand Dunes WSAs and get out if their vehicles would be more likely to cause birds to fly off than a vehicle driving down the railroad bed without the individuals getting out of the vehicle.

Conclusion

Naturalness would be lost on 14 acres associated with oil and gas activities for 3 to 5 years. Solitude and opportunities would be lost within ¼ mile of the 2 exploratory oil and gas wells for 1 year. After these periods, naturalness would return, but solitude and opportunities for primitive and unconfined recreation would be lost due to OHV use in the WSA and along the railroad bed. Birds may be less likely to use the ponds in the immediate vicinity of the railroad bed.

Impacts to Oil and Gas Exploration and Production

If the WSA were not designated, no oil and gas exploration and production is anticipated because there are no known recoverable reserves of oil and gas in the WSA. Current information does not indicate a potential for production of oil and gas. However, the opportunity to explore for oil and gas would be available on all 10,300 acres in the WSA.

Conclusion

There would be no oil and gas production from the WSA. The opportunity to explore for oil and gas

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resources would be available in the entire WSA (10,300 acres).

Impacts to Wildlife Habitat and Populations

Even though oil and gas leases would be offered in the WSA, no oil and gas exploration or development is anticipated because there are no known oil and gas reserves in the WSA.

The recreation use on the railroad bed would increase by 50 percent (approximately 150 visitor-days annually) if the bed is left open to motorized vehicles. (This would occur if neither the Buffalo Hump nor the Sand Dunes WSAs are designated.) This would increase the disturbance to elk, deer, and pronghorn antelope from the use of motorized vehicles, bicycles, and hikers on and adjacent to the railroad bed.

In the rest of the WSA, the limitation of motorized vehicles to existing roads and trails would not affect big game, because this restriction is currently in place. While there would be additional motor vehicle use, almost all of it would take place during the summer and fall when big game do not occupy the areas near the railroad bed. Therefore, the disturbance is not expected to change overall habitat effectiveness for big game in the WSA.

Motorized vehicle use associated with range management activities would be infrequent. It would have no effect on naturalness and would disrupt solitude only 2 to 3 days annually.

The WSA constitutes a small portion of the hunt areas for each species (0.5 percent for elk; 0.8 percent for deer; and 1.2 percent for antelope). Activities which affect big game would not be continuous and would generally not occur during critical periods. Therefore, big game numbers are not expected to change.

The increased recreation use (150 visitor-days annually) would result in additional disturbance to birds which frequent the areas around the ponds immediately adjacent to the railroad bed because they are easily accessible to visitors to the WSA. The additional disturbance may cause birds to move farther away from the railroad bed or into the Sand Dunes WSA, where there are more ponds. Birds may move away from the areas immediately adjacent to the railroad bed but the populations of birds in the WSA, as a whole, would not be affected because there is a sufficient number of ponds in other parts of the WSA and in the adjacent Sand Dunes WSA, to maintain a viable population. The birds would be likely to move farther into the WSAs for breeding purposes but would continue to utilize the ponds near the railroad bed as habitat for non-breeding purposes.

There would be a 50 percent increase in disturbance to killdeer which nest in the gravel of the railroad bed, including occasional crushing of eggs by motorized vehicles, bicycles, or foot traffic. This would occur if neither the Buffalo Hump nor the Sand Dunes WSAs are designated and the railroad bed is left open to motorized vehicles. The birds would become accustomed to the increased traffic and move to the sides of the gravel bed where motorized vehicles do not travel.

A guzzler would be installed primarily to benefit elk. This would result in less than 1 acre of surface disturbance. It would reduce stress to the elk from lack of water. It would also increase survival for sage grouse chicks. The disturbance to raptor nesting sites would not increase.

Conclusion

While motorized vehicle activity on the railroad bed would increase by 150 visitor-days annually, this increase would not occur during a crucial or stress period for big game. Some wildlife species (including birds) are conditioned to motorized vehicles on the railroad bed and would move for breeding to ponds farther from the railroad bed (into either the Buffalo Hump or Sand Dunes WSAs).

Impacts to Recreation Opportunities

The WSA would be used by hunters to approximately the same degree as it is now. The recreational OHV use would not affect hunting of pronghorn antelope and sage grouse, which constitutes virtually all of the hunter-days spent in the WSA. The railroad bed would provide increased access. This would increase the number of visitors to the WSA (about 150 visitor-days annually). Therefore, it appears that little new recreation opportunities would be created. Hunting would remain at 35 to 40 hunter-days annually for antelope and sage grouse.

Conclusion

Some individuals may use this area because of improved access. There would be an increase in visitor use of 150 visitor-days annually if the railroad bed is left open to motorized vehicle use (when neither the Buffalo Hump nor the Sand Dunes WSA is designated).

Impacts to Livestock Grazing

The existing level of 311 AUMs for cattle and 448 AUMs for sheep would be maintained. Motorized vehicles would be limited to existing trails; however, some use may occur off these trails by recreational

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motorized vehicles. This use would adversely affect the utility of some ponds to serve as sources for livestock water and may result in a need for more frequent maintenance. There would be an increase in harassment of livestock. The 2 existing spring-fed potholes approximately ¼ mile inside the southern boundary of the WSA would continue to be maintained every 5 years. The 3 spring-fed potholes which do not currently need periodic maintenance may require maintenance due to damage by motorized vehicles.

Conclusion

There would be no impacts to livestock grazing. The existing level of 311 AUMs for cattle and 448 AUMs for sheep would be maintained. Increased OHV activity may result in increased harassment of livestock and increased costs to maintain ponds as sources of livestock water.

SAND DUNES WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Sand Dunes WSA is in north-central Sweetwater County about 30 miles north of Rock Springs and about 13 miles southeast of Farson (Map SD-1). The WSA (26,509 acres of public land and 600 acres of Federal surface, State minerals) includes active sand dunes in the Killpecker Sand Dune region which extends eastward across south-central Wyoming into Nebraska. The WSA includes part (18,122 acres) of the 41,400-acre Greater Sand Dunes Area of Critical Environmental Concern (ACEC). The WSA (Map SD-2) includes 640 acres of State land and 160 acres of private inholdings.

Since the Final Inventory Report (USDI 1981a), 91 acres of split estate were removed from the north-eastern part of the WSA. The Final Inventory Report showed an acreage of 27,200 acres of public land for the Sand Dunes WSA. Part of section 16, T. 23 N., R. 104 W., which contains Boars Tusk (600 acres) was removed between the Final Inventory Report and the 1983 Draft EIS. (Boars Tusk is not within the WSA boundary because the road that surrounds it is an intrusion.) In this Final EIS, the map and acreage were revised to include this area as part of the Sand Dunes WSA. The acreage analyzed as inside the WSA in the Draft and Revised Draft EISs was 26,509 acres of private land. The acreage analyzed as inside the WSA in this Final EIS is 27,109 acres of public land (including the area surrounding Boars Tusk, which is Federal surface and State minerals).

Proposed Action and Alternatives

Four alternatives are analyzed: (1) 21,304 acres of the WSA would be wilderness (Proposed Action); (2) 16,280 acres of the WSA would be wilderness (Small Partial Wilderness); (3) all 27,109 acres of the WSA would be wilderness (All Wilderness); and (4) none of the WSA would be wilderness (No Wilderness - No Action).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

Proposed Action (21,304 acres designated)

The Proposed Action is to designate 21,304 acres of public land as wilderness (20,704 acres of Federal surface, Federal mineral and 600 acres split estate). The area designated includes 79 percent of the public land in the WSA. The northern (3,680 acres) and eastern (2,125 acres) parts of the WSA would not be designated. The area designated includes approximately 15,877 acres of the Greater Sand Dunes ACEC.

If acquired, 640 acres of State land inholdings along with approximately 580 acres of State land, and 80 acres of private land along the west boundary of the WSA would be added to the wilderness area. These lands contain wilderness values similar to the WSA. The inclusion of the additional lands would result in a more manageable and better defined boundary for the wilderness area.

Mineral Resources

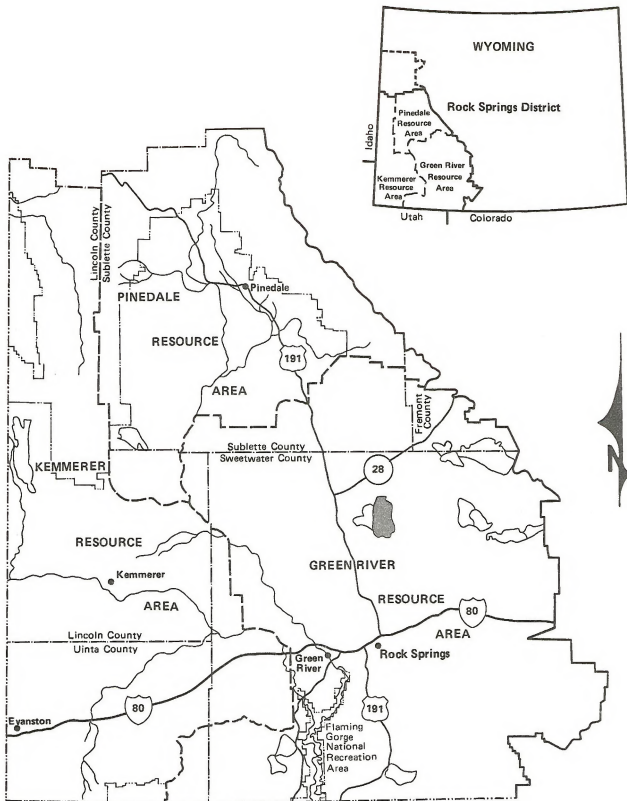
Oil and Gas Exploration and Development

In the 21,304-acre area designated, there are no pre-FLPMA leases on the 20,704 acres of Federal mineral estate. There would be no oil and gas activity. An estimated 112 BCF of natural gas and 159,120 BBLS of condensate would be foregone.

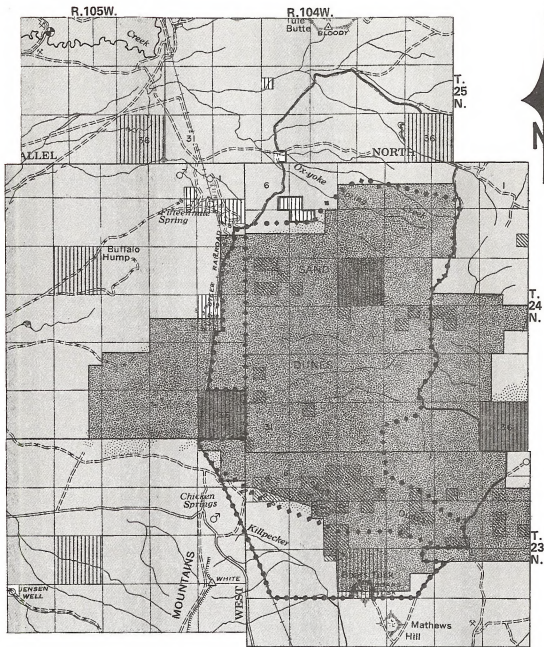
There are 920 acres of pre-FLPMA leases in the eastern part of the WSA not designated. Oil and gas leasing would occur on 5,805 acres of Federal mineral estate. Nine oil and gas wells would be drilled, resulting in 63 acres of surface disturbance. Approximately 4.5 miles of new roads would be built. Six wells would be producers and 3 would be dry holes. After the dry holes and the area not needed for production on producing wells are reclaimed, approximately 30 acres would be occupied by oil and gas wells and related facilities.

Oil and gas activities would be restricted to avoid sage grouse leks and disturbance within 500 feet of live water (ponds). Seasonal restrictions would also be used to protect crucial wildlife habitat during important time periods. Aboveground facilities would be painted to blend with surrounding landscape. Approximately 33 BCF of natural gas and 46,200 BBLS of condensate would be recovered.

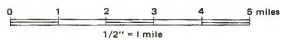
No oil and gas drilling is expected on the 160-acre private inholding in the northern part of the WSA due to the low potential for oil and gas production.



Map SD-1
SAND DUNES WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



- Wilderness Study Area Boundary
- Proposed Wilderness Boundary
- ♦♦♦♦♦ Small Partial Wilderness Boundary
- Greater Sand Dunes Recreation ACEC
- Public Land (Administered by BLM)
- Public Water Reserve
- Private Land
- State Land
- Non-Federal Minerals



Map SD-2
LAND AND MINERAL STATUS
 Sand Dunes WSA

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Solid Mineral Exploration and Development

No solid mineral potential for leasable, locatable, or salable minerals is known to exist, except for sand. Sand is available from outside the WSA to meet public demand.

Off-Highway Vehicle Use (OHV)

In the part of the WSA designated (21,304 acres), 4 miles of trails would be closed. Motorized vehicles would be prohibited except for emergency purposes. Motorized vehicle use may be allowed on a case-by-case basis for valid existing rights (e.g., the maintenance of range improvements). The railroad bed at the western boundary of the WSA would be closed to motorized vehicles, and access to the railroad bed would be blocked to discourage motorized vehicle use.

In the part of the WSA not designated (5,805 acres), OHV use would be restricted to 10 miles of existing trails and 4.5 miles of new road. The active dune areas in the 2,125-acre eastern part of the WSA, which would not be designated, would be open to OHV use. There are active dunes in approximately 1,000 acres of this area.

Recreation Use

Nonmotorized hunting activities would be allowed in the area designated. In the part of the WSA designated, 80 to 100 hunter-days would be spent annually (12 to 20 days less than current levels). Use would increase to approximately 120 hunter-days annually by the year 2040. In addition to hunting, there would be 550 to 650 visitor-days annually for recreational activities such as hiking and photography.

In the part of the WSA not designated (5,805 acres), a short-term increase of 12 to 20 hunter-days is expected as a result of displacement from the designated part of the WSA (due to the OHV closure). The increase would disappear as hunting pressure, along with oil and gas activities, would displace big game. Virtually no visitor-days of hiking and photography are expected. There would be an increase of 100 to 150 visitor-days annually for OHV recreation in the active dunes area in the eastern part of the WSA not designated. Individuals would use the area in addition to the open area to the east of the WSA.

Grazing Use

Grazing use in the WSA would not change as a result of wilderness designation. The current level of 913 AUMs for cattle and 835 AUMs for sheep

would continue from May 1 to December 14. There are 5 water sources in the area designated and one outside of the area designated. If maintenance is needed to keep these functioning as sources of livestock water, the use of heavy equipment, if no other practical options are available, would be permitted on a case-by-case basis following an environmental analysis. Motorized vehicles would be allowed only during noncritical periods for wildlife. Currently, routine maintenance is not performed on these water sources. There is 1 corral north of Boars Tusk (S½ NW¼, N½ SW¼, section 9, T. 23 N., R. 104 W.). An area on the western border of the WSA (section 12, T. 23 N., R. 105 W.) is occasionally used as a cattle branding area, where cattle are branded and held until they are trailed out of the area. The area used for branding is not always in the same location and extends approximately 5 miles to the southeast.

Wildlife Habitat Management

Four to 7 potholes would be developed in the area of the Flocks (freshwater ponds northwest of Boars Tusk) to increase and improve waterfowl habitat and enhance supplemental values associated with wilderness and the unique ecosystem in the area. Wildlife habitat and populations would be maintained by including seasonal stipulations in oil and gas leases, which would restrict oil and gas activity around the ponds and during crucial times of the year for wildlife (Appendix A). Surface-disturbing activity would be restricted within 500 feet of ponds.

Small Partial Wilderness (16,280 acres designated)

Under the Small Partial Wilderness, 16,280 acres of public land in the WSA would be designated as wilderness. The area designated is 60 percent of the public lands in the WSA and includes approximately 13,312 acres of the Greater Sand Dunes ACEC.

In addition, there are 640 acres of State land inholdings which contain wilderness values similar to the WSA. If acquired, these additional lands would result in a more manageable wilderness area.

Mineral Resources

Oil and Gas Exploration and Development

In the part of the WSA designated (16,280 acres), there are no pre-FLPMA oil and gas leases. There are 920 acres of pre-FLPMA leases in the eastern part of the WSA not designated. An estimated 89 BCF of natural gas and 126,094 BBLs of condensate would be foregone.

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On the 10,229 acres of Federal mineral estate which are not designated, oil and gas leasing would occur. Twelve oil and gas wells would be drilled, resulting in 84 acres of surface disturbance. Approximately 7 miles of new road would be built. There has been a 54 percent success rate for wells drilled in this area. Based on this, 7 of the 12 wells would be producers. After the dry holes and the area not needed for production on producing wells are reclaimed, approximately 35 acres would be occupied by oil and gas wells and related facilities.

Approximately 56 BCF of natural gas and 79,227 BBLs of condensate would be recovered from the area not designated. Six of the 12 wells would be drilled in the 2,125-acre eastern part of the WSA (not designated wilderness). Oil and gas activities would be conditioned to avoid sage grouse leks and disturbance within 500 feet of live water (ponds). Seasonal restrictions would protect crucial wildlife habitat during important periods. Aboveground facilities would be painted to blend with surrounding landscape.

No oil and gas activity is expected on the 160-acre private inholding in the northern part of the WSA due to the low potential for oil and gas production.

Solid Mineral Exploration and Development

No solid mineral potential for leasable, locatable, or salable minerals is known to exist within the WSA, except for sand. Sand can readily be supplied from outside the WSA to meet public demand.

Off-Highway Vehicle Use (OHV)

In the part of the WSA designated (16,280 acres), 2 miles of trails would be closed. OHVs would be prohibited except for emergency purposes. Motorized vehicle use by livestock operators may be allowed on a case-by-case basis after an environmental analysis. The railroad bed at the western boundary of the WSA would be open to motorized vehicles. Current use levels of 200 to 250 visitor-days annually would continue.

In the part of the WSA not designated (10,829 acres), OHV use would be restricted to 12 miles of existing trails and 7 miles of new road associated with oil and gas activities. Active dune areas (approximately 1,000 acres) in the 2,125-acre eastern part of the WSA not designated would be open to OHV use.

Recreation Use

In the part of the WSA designated (16,280 acres) 70 to 80 hunter-days would be spent annually (12

to 20 days less than current levels). This would increase to approximately 100 hunter-days annually by the year 2040. There would be 500 to 600 visitor-days annually for recreational activities such as hiking and photography.

In the part of the WSA not designated (10,829 acres), an increase of 12 to 20 hunter-days is anticipated in the short term as a result of displacement from the designated part of the WSA (due to the OHV closure and wilderness management). That increase would disappear as hunting pressure, along with oil and gas activities would displace big game. Virtually no use for hiking and photography is expected. There would be an increase of about 100 to 150 visitor-days annually for OHV recreation in the active dunes area in the eastern part of the WSA not designated. This use would be by individuals who also use the open area to the east of the WSA, as well as those who shift their use from the open area.

Grazing Use

Grazing use in the WSA would not change as a result of wilderness designation. The existing 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. There are 3 water sources in the area designated and 3 outside of the area designated. If maintenance is needed to keep these functioning as sources of livestock water, the use of heavy equipment, if no other practical options are available, would be permitted on a case-by-case basis following an environmental analysis, only during noncritical periods for wildlife. Currently, routine maintenance is not performed on these water sources. There is also 1 corral north of Boars Tusk (S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ of section 9, T. 23 N., R. 104 W.). The corral is slightly less than $\frac{1}{4}$ mile within the southern boundary of the area designated.

An area just outside the designated area on the western border of the WSA in section 12 (T. 23 N., R. 105 W.) is occasionally used as a cattle branding area. Cattle are branded and held in this area until they are trailed out of the area of the WSA. The area used for branding is not always in the same location and extends approximately 5 miles to the southeast. The branding area is in the southern part of the WSA not designated under this alternative.

Wildlife Habitat Management

Four to 7 potholes would be developed in the area of the Flockets (freshwater ponds northwest of Boars Tusk) to increase and improve waterfowl habitat and enhance supplemental values associated with wilderness and the unique ecosystem in the area. Wildlife habitat and populations would be maintained by including seasonal stipulations in oil and

SAND DUNES WSA

gas leases to protect wildlife during critical periods. Surface-disturbing activities would be restricted within 500 feet of ponds.

All Wilderness (27,109 acres designated)

All public land (27,109 acres) in the WSA, including 600 acres of split estate would be designated wilderness. The area designated includes 18,122 acres in the Greater Sand Dunes ACEC.

If acquired, 640 acres of State and 160 acres of private inholdings (which contain wilderness values similar to the WSA) would be added to the wilderness area. There are also approximately 580 acres of State land, and 80 acres of private land along the west boundary of the WSA which contain wilderness values similar to the WSA. If acquired, these lands would be added to the wilderness area, resulting in a more manageable wilderness area.

Mineral Resources

Oil and Gas Exploration and Development

In the 27,109-acre area designated wilderness (26,509 acres of Federal minerals), there are 920 acres of pre-FLPMA leases. An estimated 5 BCF of natural gas and 7,126 BBLs of condensate would be recovered. No additional drilling is anticipated. Activity in the area would be associated with the maintenance and production of the 1 well. Approximately 1 visit by a pickup and tanker per week to service the well and 2 visits annually (spring and fall) for 3 to 5 days to perform maintenance. No new leases would be issued. An estimated 140 BCF of natural gas and 198,195 BBLs of condensate would be foregone.

No oil and gas activity is expected on the 160-acre private inholding in the northern part of the WSA due to a low potential for oil and gas production.

Solid Mineral Exploration and Development

No solid mineral potential for leasable, locatable, or salable minerals is known to exist within the WSA, except for sand. Sand can readily be supplied from outside the WSA to meet public demand.

Off-Highway Vehicle Use (OHV)

In the area designated (27,109 acres), 14 miles of trails would be closed. OHVs would be prohibited except for emergency purposes. Motorized vehicle

use may be allowed on a case-by-case basis for valid existing rights (e.g., the maintenance of range improvements). The railroad bed at the western boundary of the WSA would be closed to OHVs, and the railroad bed would be blocked to discourage motorized vehicle travel. Access points would be blocked.

Recreation Use

In the 27,109-acre designated wilderness area 80 to 100 hunter-days would be spent annually (12 to 20 days less than current levels) and is anticipated to increase to approximately 120 hunter-days annually by the year 2040. In addition to hunting, there would be 550 to 650 visitor-days annually for recreational activities such as hiking and photography.

Grazing Use

The current level of 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. There are 6 water sources in the WSA. Routine maintenance is not performed to keep these functioning as sources of livestock water. The use of heavy equipment, if no other practical options are available, would be permitted on a case-by-case basis following an environmental analysis. Such activities would be allowed only during noncritical periods for wildlife. There is 1 corral north of Boars Tusk (S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ of section 9, T. 23 N., R. 104 W.). An area on the western border of the WSA in section 12 (T. 23 N., R. 105 W.) is occasionally used as a cattle branding area. Cattle are branded and held in this area until they are trailed out of the area. The area used for branding is not always the same location and extends approximately 5 miles to the southeast.

Wildlife Habitat Management

Four to 7 potholes would be developed in the area of the Flockets (freshwater ponds northwest of Boars Tusk) to increase and improve waterfowl habitat and enhance supplemental values associated with wilderness and the unique ecosystem in the WSA.

No Wilderness (No Action)

None of the 27,109-acre Sand Dunes WSA would be designated as wilderness. The 18,122-acre portion of the 41,400-acre Greater Sand Dunes ACEC would continue with management emphasis on recreation, wildlife habitat, and unique ecosystem values.

SAND DUNES WSA

Mineral Resources

Oil and Gas Exploration and Development

Oil and gas leasing would resume on 26,509 acres of Federal mineral estate not designated. It is estimated that 30 wells would be drilled, resulting in 210 acres of surface disturbance. Approximately 20 miles of new road would be built. There has been a 54 percent success rate for wells drilled in this area. Based on this, 16 of the 30 wells would be producers. After the dry holes and the area not needed for production on producing wells are reclaimed, approximately 80 acres would be occupied by oil and gas wells and related facilities. Approximately 145 BCF of natural gas and 205,320 BBLs of condensate would be recovered.

Oil and gas leases would include stipulations to avoid sage grouse leks and disturbance within 500 feet of live water (ponds). Seasonal restrictions would be used to protect crucial wildlife habitat during important time periods. Aboveground facilities would be painted to blend with surrounding landscape.

No oil and gas activity is expected on the 160-acre private inholding in the northern part of the WSA due to the low potential for oil and gas production.

Solid Mineral Exploration and Development

No solid mineral potential for leasable, locatable, or salable minerals is known to exist within the WSA, except for sand. However, sand can readily be supplied from outside the WSA to meet public demand.

Off-Highway Vehicle Use (OHV)

The use of OHVs would be limited to 14 miles of existing trails and 20 miles of new roads. The railroad bed at the western boundary of the WSA would not be closed to OHVs. The road around Boars Tusk would continue to be available for OHV use.

Recreation Use

There would be 80 to 100 hunter-days spent annually in the WSA. In the western part of the WSA, an increase of 12 to 20 hunter-days is anticipated in the short term as a result of displacement from oil and gas activity in the eastern part of the WSA. That increase would disappear as hunting pressure, and oil and gas activity, displace big game. There would be an increase of about 150 to 250 visitor-days annually for OHV recreation in the active dunes area in the eastern part of the WSA. This use would be by individuals who use the area in addition to the open

area to the east of the WSA as well as those who shift their use from the 18,166-acre open area.

Grazing Use

Grazing use in the WSA would not change as a result of nonwilderness management. The existing 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. There are 6 water sources in the WSA. They would continue to be maintained or reconstructed as needed. The use of heavy equipment would be allowed if no other resource conditions preclude it. Such activities would be allowed only during noncritical periods for wildlife. There corral north of Boars Tusk and the branding area approximately 2 miles to the west, just inside the WSA boundary, extending south beyond the WSA boundary would continue to be used. No other range improvements exists in the WSA and no new range improvements are planned.

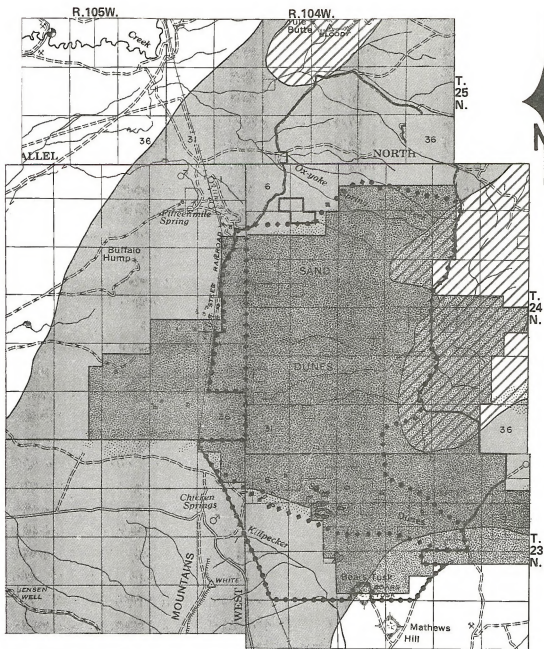
Wildlife Habitat Management

Several potholes would be developed in the area of the Flockets (freshwater ponds northwest of Boars Tusk) to increase and improve waterfowl habitat and enhance supplemental values associated with wilderness and the unique ecosystem in the area. Wildlife habitat and populations would be maintained by including seasonal stipulations, in oil and gas leases, to protect wildlife during critical periods. Surface-disturbing activities would be restricted within 500 feet of ponds.

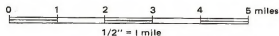
CHAPTER II - Affected Environment

Introduction

The Sand Dunes WSA (Map SD-2) has barren active dunes with deep draws and valleys. It contains wet meadows, greasewood, big sagebrush, and rabbitbrush communities. Boar's Tusk, a volcanic plug, is a prominent landmark just outside the southern edge of the WSA. Eolian ice cells feed pools at the bases of many large dunes. The ice cells form as snow and ice accumulate in the leeward side of dunes and are covered by blowing sand. The dunes help support the only desert elk herd (Sands elk herd) in Wyoming (Map SD-3). The WSA contains freshwater ponds which provide habitat for waterfowl and other small animals.



- Wilderness Study Area Boundary
- Proposed Wilderness Boundary Proposed Action
- - - - - Small Partial Wilderness Boundary
- Greater Sand Dunes Recreation ACEC
- Crucial Elk Winter Range
- Elk Summer Range



Map SD-3
ELK HABITAT
 Sand Dunes WSA

SAND DUNES WSA

There are 18,122 acres in the Sand Dunes WSA that are also in the 41,400-acre Greater Sand Dunes ACEC. The part of the ACEC in the Sand Dunes WSA is managed for wildlife values, including big game, and values associated with the unique ecosystem.

The abandoned U.S. Steel railroad bed, from which the rails and ties were removed, forms the western boundary of the WSA (a common boundary between the Sand Dunes and Buffalo Hump WSAs). The bed is about 3 to 5 feet above the rest of the original right-of-way. Since the rails and ties were removed, the railroad bed provides a gravel surface suitable for some motorized vehicles. There are places where the sand covers the bed. The railroad bridge at the Pacific Creek crossing near Highway 28 was removed, making a trip along the entire length of the bed impossible. There are no arrangements for maintaining the surface in a condition safe for motorized vehicle use. The right-of-way holder plans to relinquish the right-of-way.

Part of the eastern boundary of the WSA is formed by a double-poled H-frame transmission line. Other parts of the eastern boundary are formed by a road which runs roughly along the transmission line. During the inventory, the WSA boundary sometimes includes the transmission line and other times the road within the WSA.

Wilderness Values

The Sand Dunes WSA contains 27,109 acres of public land (including 600 acres of split estate), 640 acres of State land, and 160 acres of private land. The WSA meets the criteria in Section 2(c) of the Wilderness Act of 1964.

Naturalness

The WSA is in a natural condition. The intrusions are considered minor and do not detract from the apparent naturalness of the WSA. These intrusions include 3 producing wells in the eastern part of the WSA, 2 abandoned well sites within 50 feet of the WSA boundary, an old corral in the southwestern part, and a deteriorating barbed wire fence in the northern part of the WSA. There are intrusions due to motorized vehicles in the northern part of the WSA. Large dunes in parts of the WSA make it possible for a visitor to experience naturalness because human-caused disturbances are not apparent. The constantly changing nature of the dunes adds to this feeling.

Solitude

Many wind-blown basins exist with the WSA. The draws, valleys, and ridges in the northern and eastern sections provide outstanding opportunities for solitude, due to the screening they offer. The size of the WSA and the large amount of active sand dunes create excellent opportunities for solitude. The sandy ground virtually eliminates casual use of motorized vehicles, except on the boundaries of the WSA. The only vehicles that can easily use the area are large-tired recreational OHVs (e.g., dune buggies).

Primitive and Unconfined Recreation

The Greater Sand Dunes ACEC management plan was prepared to protect unique resource values in the area covering 38,480 acres of public land and 2,920 acres of State and private land extending east-west across the Killpecker Sand Dunes. The critical resources present include wildlife, cultural and scenic values, unique ecological systems, unique recreation opportunities, and a producing oil and gas field. The WSA appears to be at the western edge of the field. The unique setting and biological communities in the WSA and the ACEC provide a diverse setting for environmental education. The WSA is used for these purposes several times each year.

The variety of dunes, from active to stabilized, adds to the uniqueness of the area. Outstanding opportunities for primitive and unconfined recreation are readily available. Hiking in the dunes is strenuous but can be a rewarding experience. Other activities include bird-watching, hunting, sightseeing, and photography. Recreationists use the WSA for hiking, photography, and other nonmotorized uses (approximately 400 to 500 visitor-days annually).

Special Features

Birds, including waterfowl, passerines, and shorebirds (e.g., killdeer), are relatively abundant in parts of the area. This provides an unusual opportunity for viewing and photography in nearby areas of the high desert.

Ecologically, the most unique features of the WSA are the eolian ice cells that feed pools at the base of many large dunes. These pools, or ponds, range in depth from a few inches to 10 feet deep, some being crystal clear and almost devoid of life, while

SAND DUNES WSA

others are muddy, murky, and alive with tadpoles, salamanders, insects, waterfowl, and various grasses and algae. The dunes help support the only desert elk herd (Sands elk herd) in Wyoming. About 40 resident head occupy the WSA with 200 to 230 head of transient elk using the general area of the Sand Dunes and Buffalo Hump WSAs. A native plant that resembles the russian olive grows to a height of 4 to 5 feet near the road which divides the WSA from the OHV open area.

Mineral Resources

Hydrocarbons are the most valuable potential mineral resource. Producing oil and gas fields occur within, immediately east, and southeast of the WSA. The WSA contains 26,509 acres of Federal mineral estate with 920 acres of pre-FLPMA leases held by production. The mineral estate is held by the State of Wyoming on 1,240 acres, and privately on 160 acres. There are 3 producing wells in the eastern part of the WSA. The high development potential area in the WSA includes a part of the Nitchie Gulch field (T. 23 N., R. 103 W.).

Reserves per 640-acre spacing in the Sand Dunes WSA are estimated to be 3.5 BCF of natural gas and 4,957 BBLS of condensate based on Frontier Formation production only. Recoverable reserves in the WSA are 145 BCF of gas and 205,320 BBLS of condensate. The average success ratio for wells drilled in the area is 54 percent and this is assumed to apply to the WSA.

Sand is available in abundance in the Sand Dunes WSA. However, sand is also available in abundance in many nearby areas outside the WSA. Supply from these sources is adequate to meet existing and anticipated future demand.

Wildlife

The WSA provides important wildlife habitat. The unique ability of the Killpecker Sand Dunes to store water in the form of ice cells and to release it during the summer is critical to several species of wildlife. The Steamboat Mountain - Sands elk herd frequents most of the WSA. Loco Butte (southwest of Essex Mountain) often winters from 35 to 80 or more head of elk annually. Warm spring weather stimulates movement of cow elk to historic calving areas in Indian Gap and nearby Steamboat Rim. Ponds and shallow pools from Loco Butte to Buffalo Hump provide summer water for at least 40 resident elk. During interim management, elk numbers have increased

about 5 percent annually, due mostly to restrictions on motorized vehicles (mostly dune buggies) in the WSA.

Mule deer are found in the WSA, but the habitat does not contribute significantly to the overall forage, cover, and fawning of the herd unit. Areas with water become important to the deer after fawning. In excess of 75 head use the WSA during the summer and fall. Essex Mountain and the tall sagebrush in the draws to the west are used as escape cover and for spring deer fawning.

Pronghorn antelope use the WSA yearlong. Unnamed ponds provide spring fawning habitat and summer water. The WSA provides fall and early winter range for more than 100 head of pronghorn antelope. Southern areas, including the Flockets (freshwater ponds northwest of Boars Tusk) south of Loco Butte, and Boars Tusk are yearlong home to about 30 pronghorn antelope. By fall, the population increases to over 200 as pronghorn antelope move in from unwatered areas outside the WSA.

The Sand Dunes WSA constitutes 1.4 percent of the 1,999,076-acre Steamboat elk hunt area; 2.1 percent of the 1,295,248-acre Steamboat mule deer hunt area; and 3.2 percent of the 858,181-acre Eden pronghorn antelope hunt area.

Approximately 70 freshwater ponds, which range in depth from a few inches to 10 feet produce approximately 500 ducklings annually. Other waterfowl and shorebirds include white-faced ibis, killdeer, snowy plover, sandpipers, sage grouse, avocets, and common wading birds. The sage grouse is a common upland game bird which inhabits the WSA.

Hummingbirds arrive in early August and leave for southerly climates by late August. Migrating passerine birds also increase in number around ponds in late summer and early fall. Spadefoot toads, tiger salamanders, and wandering garden snake represent common amphibians and reptiles. There are no fish in the ponds. The WSA contains pocket mice, white-faced mice, and Ord kangaroo rats. Great horned owls have also been found in the WSA.

A 1982 aerial survey revealed one 20-acre prairie dog town on the Sand Dunes WSA. There is no habitat for bald eagles, peregrine falcons, Colorado squawfish, or humpback chub. In the Flockets, on the south end of the WSA, whooping cranes have been observed feeding and resting in these areas.

Recreation Opportunities

Off-highway vehicle users (approximately 375 to 400 visitor-days annually) and hunters (approximately 80 to 100 hunter-days annually) are the pri-

SAND DUNES WSA

mary users of the Sand Dunes area. Most off-highway vehicle enthusiasts use relatively broad areas during their visit. They use the 18,166-acre open OHV area to the east of the WSA, as well as areas around the open OHV area. A parking area for OHV recreationists (with interpretive signs and sanitary facilities) was built on the edge of the dunes, outside the WSA.

Estimates of use for the hunt areas in which the Sand Dunes WSA is located include 229 hunter-days in the 1,999,076-acre Steamboat elk hunt area; 1,832 hunter-days in the 1,295,248-acre Steamboat mule deer hunt area; and 2,097 hunter-days in the 858,181-acre Eden pronghorn antelope hunt area.

The abandoned U.S. Steel railroad bed is used by visitors to access the western part of the Sand Dunes and Buffalo Hump WSAs. Approximately 200 to 250 visitor-days are spent in the WSA from this access point. Approximately 150 to 200 visitor-days are spent by individuals driving on the railroad bed to access locations north of the WSA. There is good sage grouse habitat adjacent to the railroad bed several miles north of the WSA. When the railroad was present, the sage grouse were not hunted. The removal of the rails and ties created new access, opening the area to sage grouse hunting both from the south (Rock Springs) and the north (Farson).

Livestock Grazing

Within the Sand Dunes WSA (part of the Sand Grazing allotment), the estimated carrying capacity is 913 AUMs for cattle and 835 AUMs for sheep, with use occurring from May 1 to December 14. There are 6 water sources within the WSA boundary. There is a corral and a cattle branding area within the WSA, north of Boars Tusk.

Water availability is generally good and dependable because of the existing reservoirs and the natural potholes. There is no apparent need for new range improvements as long as the natural ponds continue to serve as water sources. These water sources are currently not maintained on a regular basis.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of the environmental consequences for the Proposed Action (des-

ignate 21,304 acres), the Small Partial Wilderness (designate 16,280 acres), the All Wilderness (designate 27,109 acres), and the No Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-4 summarizes the impacts by alternative. Table 2-4 summarizes the impacts by alternative.

Proposed Action and Alternatives

Proposed Action (21,304 acres designated)

As a result of designating 21,304 acres of public lands in the Sand Dunes WSA, including 600 acres of split estate (79 percent of the WSA), there would be adverse impacts on wilderness values, oil and gas production, wildlife, and recreation.

Impacts to Wilderness Values

Naturalness

Naturalness would be preserved in the area designated (21,304 acres) because wilderness management would preclude all but OHV use essential to livestock management and prohibits oil and gas leasing. Four miles of existing trails and 7.6 miles of railroad bed would be closed to motorized vehicles. The reduction of opportunities for wilderness impairing actions to take place would help preserve naturalness.

Naturalness would be lost on the eastern part of the WSA (2,125 acres) where 6 wells would be drilled, resulting in 42 acres of disturbance during drilling and 21 acres of disturbance during production from 5 wells. In the northern part of the WSA not designated (3,680 acres), naturalness would be lost on 21 acres during drilling of 3 oil and gas wells and 5 acres during production from 1 well.

Naturalness would also be lost due to the continued use of the 4 miles of trails in that area by OHVs. Motorized vehicle use would not affect active dunes in the area not designated wilderness. However, OHVs would remove the vegetation from partially stabilized dunes in the area not designated wilderness. This would partially destabilize the dunes but would only result in a short-term effect to naturalness because the active dunes are constantly changing.

TABLE 2-4
SUMMARY OF IMPACTS SAND DUNES WSA

	Proposed Action (Large Partial Wilderness)	Alternative A (Small Partial Wilderness)	Alternative B (All Wilderness)	Alternative C (No Wilderness)
Public Lands Designated	21,304 acres (79%)	16,280 acres (62%)	27,109 acres (102%)	0 acres (0%)
Other Lands	640 acres of State inholdings would be added, if acquired. 580 acres of State and 80 acres private land outside WSA would be added, if acquired.	640 acres of State inholdings would be added, if acquired.	640 acres of State and 160 acres of private inholdings would be added, if acquired. 580 acres of State and 80 acres private land outside the WSA would be added, if acquired.	640 acres of State and 160 acres of private inholdings in the WSA
Area of Critical Environmental Concern (ACEC)	15,877 acres of area designated and 2,245 acres of area not designated are in the 41,400-acre Greater Sand Dunes ACEC.	13,312 acres of area designated and 4,810 acres of area not designated are in the 41,400-acre Greater Sand Dunes ACEC.	18,122 acres of WSA are in the 41,400-acre Greater Sand Dunes ACEC.	18,122 acres of WAS are in the 41,00-acre Greater Sand Dunes ACEC.
Wilderness Values				
Naturalness	Naturalness protected on 21,304 acres designated. Naturalness lost on 27 acres in area not designated due to drilling of 9 oil and gas wells.	Naturalness protected on 16,280 acres designated. Naturalness lost on 84 acres in area not designated due to drilling of 12 oil and gas wells.	Naturalness preserved in entire WSA.	Naturalness lost on 210 acres due to drilling 30 oil and gas wells and to increased OHV use.
Solitude	Solitude protected on 21,304 acres designated. Solitude lost in 5,805-acre area not designated due to drilling of 9 oil and gas wells and increased OHV use.	Solitude protected on 16,280 acres designated. Solitude lost in 10,229-acre area not designated due to drilling of 12 oil and gas wells and increased OHV use.	Solitude preserved in the entire WSA except for 1 visit weekly by motorized vehicle to existing producing well and 2 visits annually (3 to 5 days) for well maintenance.	Solitude lost in the entire WSA due to drilling of 30 oil and gas wells, production from 17 wells, and motorized vehicle activity, including increased OHV use.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation protected on 21,304 acres designated.	Opportunities for primitive and unconfined recreation protected on 16,280 acres designated.	Opportunities for primitive and unconfined recreation protected in the entire WSA.	Opportunities for primitive and unconfined recreation lost in entire WSA.

TABLE 2-4 (Continued)
SUMMARY OF IMPACTS SAND DUNES WSA

	Proposed Action (Large Partial Wilderness)	Alternative A (Small Partial Wilderness)	Alternative B (All Wilderness)	Alternative C (No Wilderness)
Special Features	Special features, including sand dunes, ponds, eolian ice cells, and Sands elk herd, protected on 21,304 acres designated.	Special features, including sand dunes, ponds, eolian ice cells, and Sands elk herd, protected on 16,280 acres designated.	Special features, including sand dunes, ponds, eolian ice cells, and Sands elk herd, protected in the entire WSA.	Ponds preserved because stipulations on oil and gas activity would preclude activity that would damage them. OHV use may damage the ponds and reduce use by waterfowl. Sands elk herd would avoid the area during oil and gas drilling. Sand dunes and eolian ice cells would be preserved.
Minerals Oil and Gas	Area designated includes 20,544 acres Federal minerals. Projected production of 112 BCF of natural gas (\$145 million) and 159,120 BBLs of condensate (\$3 million) foregone.	Area designated includes 16,280 acres Federal minerals. Projected production of 89 BCF of natural gas (\$116 million) and 126,094 BBLs of condensate (\$2.4 million) foregone.	Projected production foregone from 26,509 acres of Federal minerals is 140 BCF natural gas (\$182 million) and 198,000 BBLs of condensate (\$3.8 million). Projected production from pre-FLPMA leases is 5 BCF natural gas (\$6.5 million) and 7,126 BBLs of condensate (\$135,000).	No portion of the WSA designated.
	In 5,805-acre area not designated, potential production is 33 BCF of gas (\$43 million) and 46,200 BBLs of condensate (\$880,000). There are 920 acres of pre-FLPMA lease in (2,125 acres) of the WSA. Likelihood of oil and gas activity is highest in eastern part of WSA (not designated under the Proposed Action).	In area not designated (10,299 acres), potential production is 56 BCF natural gas (\$73 million) and 79,227 BBLs of condensate (\$1.5 million). There are 920 acres of pre-FLPMA lease (2,125 acres) of the WSA. Likelihood of oil and gas activity is highest in eastern part of WSA (not designated under Alternative A).	All of WSA is designated.	Area not designated includes 26,509 acres Federal minerals. Potential production is 145 BCF natural gas (\$189 million) and 205,302 BBLs of condensate (\$3.9 million).

TABLE 2-4 (Continued)
SUMMARY OF IMPACTS SAND DUNES WSA

	Proposed Action (Large Partial Wilderness)	Alternative A (Small Partial Wilderness)	Alternative B (All Wilderness)	Alternative C (No Wilderness)
Wells in WSA Not Designated	9	12	1	30
Surface Disturbance in WSA Not Designated	63 acres	84 acres	7 acres	210 acres
Solid Minerals	No potential	No potential	No potential	No potential
Wildlife Habitat and Populations	In the area designated, surface disturbance and human intrusions would be prohibited in active and stabilized sand dunes, and near freshwater ponds. Four miles of trail and 7.6 miles of railroad bed closed. This would help to maintain wildlife habitat and populations. Big game populations would increase by 25%.	In the area designated, surface disturbance and human intrusions would be prohibited in active and stabilized sand dunes, near freshwater ponds, and on 2 miles of trail. This would help to maintain wildlife habitat and populations. Big game populations would increase by 25%.	All Wilderness designation would protect habitat for elk, deer, and antelope. Populations would increase by 33%. 14 miles of trail and 7.6 miles of railroad bed would be closed. Freshwater ponds would remain undisturbed. Waterfowl populations would be maintained. Oil and gas activity would continue acres of pre-FLPMA lease causing big game to avoid the area surrounding the producing well. All of WSA is designated	No part of the WSA is designated. Within the WSA, surface disturbance and human intrusions would increase adversely affecting big game. Big game numbers would increase in the short term as they are displaced from areas east of the WSA and in the eastern part where oil and gas activity and OHV activity occurs.
	In the 5,805-acre northern and eastern parts not designated, surface disturbance and human activity would occur on 920 acres of pre-FLPMA leases and OHV activity would resume on 10 miles of trail. This would displace big game into the area designated, increasing the pressure on the	In the 10,299 acres not designated, 12 miles of trail and 7.6 miles of railroad bed would remain open to OHV use. OHV use would increase on stabilized dunes, contributing to loss of vegetation. Freshwater ponds would be adversely affected and waterfowl production reduced by 50%. Disturbance due to		

SAND DUNES WSA

TABLE 2-4 (Continued)
SUMMARY OF IMPACTS SAND DUNES WSA

	Proposed Action (Large Partial Wilderness)	Alternative A (Small Partial Wilderness)	Alternative B (All Wilderness)	Alternative C (No Wilderness)
Wildlife Habitat and Populations (Continued)	habitat of the designated portion of the WSA.	oil and gas development would result in habitat loss for elk and in elk avoiding the area. Because elk use adjacent areas to a higher degree, affected.		Big game numbers would be reduced by 50% in the long term. 14 miles of trail and 7.6 miles of railroad bed would remain open to OHV use. OHV use would increase on stabilized dunes, contributing to loss of vegetation. Freshwater ponds would be adversely affected and waterfowl production reduced by 50%.
Recreation Opportunities	<p>In the area designated, hunter-days would remain the same in the short term. OHV use would be eliminated in all but the northern and eastern parts of the WSA. The OHV open area, east of the nearby WSA, would continue to provide opportunity for OHV recreation. The 7.6 miles of railroad bed at the western boundary of the WSA and 4 miles of trails in the WSA would be closed to vehicle travel. OHV users would decrease 140 to 160 visitor-days annually.</p> <p>Visitor-days by hikers spent in the WSA would decrease 100-125 days in the short term and increase 100-125 in the long term.</p>	<p>In the area designated, hunter-days would remain the same in the short term. OHV use would be eliminated on 2 miles of trail. The nearby OHV open area would continue to provide opportunity for OHV recreation. OHV users would decrease 140 to 160 visitor-days annually. Visitor-days by hikers spent in the WSA would increase 100-125 in the short term due to open railroad bed and trails. Hiker use would increase 100-125 visitor-days in the long term.</p>	<p>In the area designated, hunter-days would remain about the same in the short term. OHV use would be eliminated on the 7.6-mile railroad bed and 14 miles of trails. The nearby OHV open area would continue to provide opportunity for OHV recreation. OHV use would decrease 375-400 visitor-days annually. Visitor-days by hikers spent in the WSA would decrease 100-125 in the short term and increase 100-125 in the long term. Overall recreation use of the WSA would decrease in the short term 375-400 visitor-days annually and increase by 50% in the long term.</p>	<p>No part of the WSA is designated.</p>

TABLE 2-4 (Continued)
SUMMARY OF IMPACTS SAND DUNES WSA

	Proposed Action (Large Partial Wilderness)	Alternative A (Small Partial Wilderness)	Alternative B (All Wilderness)	Alternative C (No Wilderness)
Recreation Opportunities (Continued)	In the area not designated, OHV use and hunter-days would increase slightly.	In the area not designated, the 7.6-mile railroad bed and 12 miles of trail would be open to OHV use. Recreation for hunters and OHV users would increase.	All of WSA is designated.	Motorized vehicle access would increase. The 7.6 miles of railroad bed and 14 miles of trail would be open to OHV use. OHV recreation would increase by 175 to 275 visitor-days annually. Hunter-days would decrease. Increased surface disturbance would decrease wilderness type recreation and hunter use of the WSA. Increases and decreases in recreation would be small in relation to current use.
	Overall recreation use of the WSA would decrease by 300 visitor-days annually in the short term and increase by 50% in the long term.	Overall recreation use of the WSA would decrease in the short term by 200 visitor-days annually and increase by 50% in the long term.	Overall recreation use would decrease by 375-400 visitor-days in the short term and increase by 50% in the long term.	Overall recreation use would increase by approximately 100 visitor-days annually.
Livestock Grazing	Livestock numbers and grazing operations would not be affected. Occasional inconvenience to livestock operators due to restriction on motorized vehicle use in the area designated. In area not designated (5,805 acres), increased OHV use would cause increased disturbance of vegetation and harassment of livestock.	Livestock numbers and grazing operations would not be affected. Occasional inconvenience to livestock operators would occur due to restriction on motorized vehicle use in the area designated. In 10,299-acre area not designated, increased OHV use would cause increased disturbance of vegetation and harassment of livestock.	Livestock numbers and grazing operations would not be affected. Occasional inconvenience to livestock operators would occur due to restriction on motorized vehicle use in the area designated. All of WSA is designated.	Livestock numbers and grazing operations would not be affected.

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Solitude

Solitude would be preserved in the area designated (21,304 acres) because wilderness management would preclude all but essential OHV use, reducing the potential for noise from motorized vehicles to disrupt the area's solitude.

Solitude would be preserved because wilderness management precludes all but essential OHV use, reducing the potential for noise from motorized vehicles to disrupt the area's solitude.

In the area not designated, solitude would be lost on the area immediately surrounding the 1 producing well for a distance of up to 1/2 mile away while the well is in production. The loss in solitude would be apparent when the well is maintained, serviced, or checked (approximately 60 days per year). Weekly servicing of the well accounts for about 80 percent of the days during which solitude would be affected, primarily by motorized vehicle travel. However, this servicing would only affect solitude for a short period during these days (less than 1 hour).

In the area not designated, solitude would be lost in the eastern part of the WSA (2,125 acres) as a result of activities associated with the drilling of 6 wells, production from the 5 wells, and the maintenance activities on the new roads to reach the drill sites. As with the existing producing well, maintenance activity on these producing wells would result in a loss in solitude for approximately 60 days annually. These effects on solitude would not be cumulative because several of the wells may be checked on the same trip during most years. Solitude would also be lost in the northern part of the WSA (3,680 acres) when OHVs use the 9 miles of trails and when 3 oil and gas wells are drilled. Solitude would also be lost due to increased use of OHVs on active dunes.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation would be maintained in the 21,304-acre area designated because wilderness management precludes development activity and all but essential OHV use, leaving the general setting of the area as a more primitive, undisturbed area. There would be no new oil and gas leasing. These limitations on activities eliminating new evidence of the presence of people, would increase a visitor's perception that the area is primitive and undisturbed.

Opportunities for primitive and unconfined recreation would be lost in the eastern part of the WSA (2,125 acres) because of the oil and gas development expected to take place. Primitive and unconfined recreation would also be lost in the northern part of the WSA (3,680 acres) when OHVs would be using the 9 miles of trails or active dune area and when 3 oil and gas wells are drilled.

Special Features

The ponds and eolian ice cells associated with the Sand Dunes WSA would be preserved under the Proposed Action. The WSA would continue to contain a sand dunes ranging from active dunes to partially stabilized dunes. The designation of 21,304 acres within the WSA would continue to provide valuable habitat for big game (including desert elk), waterfowl, small mammals, and other small animals.

Conclusion

Naturalness, solitude, and opportunities for primitive and unconfined recreation would be maintained on the 21,304 acres designated. Naturalness, solitude, and opportunities for primitive and unconfined recreation would be lost on 5,805 acres not designated in the northern and eastern parts of the WSA. The area's special features would be preserved in the entire WSA.

Impacts to Oil and Gas Exploration and Production

Potential production from the 5,805 acres of Federal mineral estate which would be leased estimated to be 33 BCF of natural gas (\$43 million) and 46,200 BBLs of condensate (\$880,000). Oil and gas activity is most likely in the eastern part of the WSA where oil and gas has already been found. Most of the oil and gas production in the area is occurring to the east of the WSA. This indicates that in the next several years, exploration and production would increase in the eastern part of the WSA not designated.

The opportunity to develop oil and gas resources in 20,704 acres of Federal mineral estate would be foregone in the area designated. A projected 112 BCF of natural gas (\$145 million) and 159,120 BBLs of condensate (\$3 million) from 10 producing wells would be foregone. The eastern part of the WSA has higher oil and gas potential than the western part of the WSA.

Conclusion

A projected 33 BCF of natural gas (\$43 million) and 46,200 BBLs of condensate (\$880,000) would be produced from 6 producing wells in the area not designated. A projected 112 BCF of natural gas (\$145 million) and 159,120 BBLs of condensate (\$3 million) from 10 producing wells would be foregone. Potential production foregone is 0.22 percent of the potential production in the Green River Basin (50,000 BCF of gas).

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Impacts to Wildlife Habitat and Populations

Designation of 21,304 acres of public land as wilderness would protect habitat for elk, deer, and antelope within the area designated, by limiting human intrusions (especially OHV use and oil and gas activity). Oil and gas activity would affect habitat and cause big game to avoid the area surrounding the producing well and other activity that occurs in the area not designated. Oil and gas activity taking place immediately to east of the WSA would continue to displace animals into the area designated, increasing the population in the area designated by about 25 percent. This effect is expected to continue for the long term. This will place a greater pressure on the resources of the area designated, especially vegetation, to support the displaced wildlife.

Nine oil and gas wells would be drilled in the area not designated (5,805 acres), resulting in 63 acres of surface disturbance due to roads and well pads. When 6 wells go into production, 30 acres would be occupied by oil and gas facilities. This area would be lost as wildlife habitat. The cumulative impacts of animals displaced from oil and gas activities to the east of the WSA and the 5,805 acres not designated would place a greater pressure on the habitat of the area designated. If big game populations are maintained at objective levels, the habitat in the WSA would support the displaced animals.

The 5,805 acres of the WSA not designated constitute only about 1/4 of 1 percent of the Steamboat elk hunt area. Other areas of the larger Steamboat elk hunt area generally receive high use levels by big game. The closure of the railroad bed to vehicle traffic would help to eliminate avoidance of this area by wildlife. Since this area contains many ponds, which provide valuable habitat to both big game and birds, wildlife populations would be maintained.

Conclusion

Big game populations in the WSA would increase by about 25 percent in the short term (3 to 5 years) as they are displaced from the area east of the WSA. The increased population in the area designated would continue for the long term (50 years).

Impacts to Recreation Opportunities

The impacts to primitive and unconfined recreation were discussed under Impacts to Wilderness Values. The most important impact to recreation opportunities under the Proposed Action (wilderness designation of 21,304 acres of public land) is an elimination of the designated area for use by OHV recreation. The Greater Sand Dunes ACEC was des-

ignated in part to provide these opportunities. There is an 18,166-acre open OHV area including a parking lot available for use by these recreationists. The active dunes within and outside the WSA are highly sought for OHV recreation. The evidence of OHV use disappears in a short time due to blowing and shifting sand. However, there appears to be a demand for an increased open area for this type of recreation. The WSA was used about 300 to 400 visitor-days in this type of recreation prior to its designation as a WSA. Since designation as a WSA about 8 years ago, this use has stopped and is now confined to the 18,166-acre open OHV area.

The 4 miles of trails in the area designated would be closed to motorized vehicles except those associated with valid existing rights. This would eliminate an opportunity for individuals to visit the area using motorized vehicles. Because there are only 4 miles of trails and because the sand makes travel by even an ordinary 4-wheel drive vehicle (pickup or jeep) difficult, this use may be up to 25 visitor-days per year. Under the Proposed Action, this opportunity would be foregone.

The opportunity for people to visit the area not designated using the 10 miles of existing trails would continue, and would be increased by the construction of 4.5 miles of new roads. Existing trails extend into the boundary of the sandy area from the more heavily used trails, including the road leading the OHV parking area and the abandoned railroad bed. Recreation use with motorized vehicles would be up to 250 visitor-days annually.

In the short term, the number of hunter-days would remain about the same (80 to 100 hunter-days annually). The number of hunter-days spent in the WSA would increase to approximately 100 annually as the population of big game in the WSA increases as a result of displacement of big game due to oil and gas activities east of the WSA. When oil and gas activity begins in the area not designated, all of this increase in hunter use would occur in the area designated. Due to the increase in the number of big game displaced by oil and gas activity to the east of the WSA, there would be an increase in the quality of the hunting experience and a potential increase in success.

All motorized vehicle use would be eliminated in the area designated (21,304 acres). This would have an adverse impact on motorized recreation vehicle enthusiasts who used the part of the area before it became a WSA. This loss of motorized (OHV) use is expected to be accommodated on the open OHV use area to the east of the WSA. However, some users would have to drive long distances (up to 50 miles) to get to the open area because of the access limitations caused by the existence of the wilderness area (with a prohibition against motorized vehicles).

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About half of the 200 to 250 individuals who access the WSA from the railroad bed to the west of the WSA would cease to use the area. The remainder would access the WSA from other locations. This would be a short-term reduction of 100 to 125 visitor-days in the vicinity of the WSA. However, in the long term, hiker use would increase slightly (100 to 125 visitor-days annually) over current levels because of the unique values in the Sand Dunes and the solitude preserved by eliminating motorized vehicles and oil and gas activities. In the area designated, visitor use for nonmotorized recreation not associated with hunting (e.g., hiking, photography) would be 500 to 600 visitor-days annually.

Overall, recreation use of the area designated is expected to decrease in the short term (approximately 300 visitor-days annually) with the change from some motorized to all nonmotorized use. Recreation use in the vicinity of the WSA would increase because of the shift of users from the WSA into nearby areas, increased regional demand, the perceived added diversity if the area proposed is designated, and the establishment of the open OHV area.

Some OHV use would resume in the northern part of the WSA but it would be minimal because the northern part of the WSA does not have the acreage or active dunes demanded by OHV recreationists. The eastern part of the WSA contains dunes and would be used by OHV recreationists where there are no conflicts with oil and gas activities.

Approximately 25 percent of OHV users (90 to 100 annually) displaced from the WSA, would use the part of the WSA not designated. The closure of the railroad bed to motorized vehicles would result in about 25 percent of the displaced users (50 to 60 annually) shifting to the parts of the WSA not designated. Approximately 50 percent of the hunters displaced from the area designated (12 to 20) would use the area not designated. The lower percentage for off-highway vehicle enthusiasts is due to the existence of the open OHV "play" area near the WSA. Most displaced recreationists would use the open area.

In the long term, overall recreation use in the WSA would increase 50 percent above current levels because of increased regional demand, the perceived added diversity if the area, the existing open OHV area adjacent to the WSA, increased hunting quality, hiking, and diverse wildlife photography opportunities.

Conclusion

Hunting opportunities would remain at 70 to 80 hunter-days annually in the short-term. Closure of the railroad bed to motorized vehicles would, in the short term, reduce hikers by about 50 percent (100

to 125 visitor-days annually). In the long term, hiker use would increase by 100 to 125 visitor-days annually. In the short term, an overall reduction in use of approximately 300 visitor-days annually would occur because of the elimination of motorized vehicles.

Impacts to Livestock Grazing

The designation of 21,304 acres of public land within the Sand Dunes WSA would not affect livestock numbers. The current level of 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. Routine maintenance is not currently performed on water sources in the WSA. If maintenance is needed, the use of motorized vehicles would be considered on a case-by-case basis. Surface disturbance due to oil and gas operations and OHV use on the area designated would be eliminated except for valid existing rights. This would help to conserve the vegetation resource. The elimination of OHV recreation would reduce disruption to grazing management practices and disturbance to livestock from OHVs using partially stabilized dunes, areas around the ponds, or other areas where livestock may congregate.

Both oil and gas activities and recreational OHV use would occur mostly in the eastern part of the WSA. Since this is a small area (2,125 acres) and both oil and gas activities and OHV use currently occurs just outside the eastern boundary of the WSA, increased use on this area is not expected to adversely affect livestock grazing.

The corral and branding area would continue to be used, but motorized vehicles would generally not be allowed for routine activities.

Conclusion

Livestock grazing would not be affected. The current level of livestock use would continue at 913 AUMs for cattle and 835 AUMs for sheep (May 1 to December 14). There would be an occasional inconvenience to livestock operators in maintaining range improvements without using motorized vehicles.

Unavoidable Adverse Impacts

A projected 112 BCF of natural gas and 159,120 BBLS of condensate from 10 producing wells would be foregone. Nine oil and gas wells would disturb 63 acres for the short term. After reclamation of dry holes and areas not needed for production from the 6 producing wells, 30 acres would be occupied by oil and gas facilities.

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Naturalness, solitude, and opportunities for primitive and unconfined recreation would be lost on 5,805 acres not designated in the northern and eastern parts of the WSA due to oil and gas activity and OHV use. These activities would also cause big game to be displaced from the area not designated.

Irreversible and Irrecoverable Commitments of Resources

A projected 33 BCF of natural gas and 46,200 BBLs of condensate would be removed from the WSA during oil and gas production from 6 producing wells. There would be no other irreversible or irretrievable commitments of resources.

Short-Term Uses versus Long-Term Productivity

The acreage occupied by oil and gas facilities for the life of producing wells (30 acres), would not affect the long-term productivity of the WSA. However, the human activity as a result of oil and gas production and OHV use would result in the loss much of the 5,805-acre area not designated as wildlife habitat. There would be no effect on the long-term productivity of the area not designated to provide forage for domestic livestock. Long-term productivity in the 21,304-acre area designated would not be affected.

Small Partial Wilderness (16,280 acres designated)

As a result of designating 16,280 acres of public land in the WSA (60 percent of the public land in the WSA), there would be adverse impacts on wilderness values, oil and gas production, wildlife, and recreation.

Impacts to Wilderness Values

Naturalness

Naturalness would be preserved on all of the 16,280-acre wilderness area because wilderness management precludes all but essential OHV use and prohibits oil and gas leasing. The reduction of opportunities for wilderness impairing actions to take place would help preserve naturalness.

Naturalness would be lost on 42 acres in the eastern part of the WSA (2,125 acres) where 6 oil and gas wells would be drilled. In the northern part of the WSA (3,680 acres), naturalness would be lost on 21 acres where 3 oil and gas wells would be drilled.

After the dry holes and the area not needed for production on producing wells are reclaimed, naturalness would be lost on approximately 30 acres occupied by oil and gas wells and related facilities.

Naturalness would also be lost due to the continued use of the 9 miles of trails in the northern part of the WSA by OHVs. The OHV use would not affect active dunes in the area designated wilderness. However, OHVs would remove the vegetation from partially stabilized dunes in the area not designated wilderness. This would partially destabilize sand dunes but would result in a short-term effect to naturalness because the active dunes are constantly changing.

Naturalness would be maintained in the 1,125-acre western part, where no oil and gas activity would take place. Naturalness would be lost on 21 acres in the 3,139-acre southern part of the WSA where 3 oil and gas wells would be drilled. After the dry holes and the area not needed for production on the producing well are reclaimed, naturalness would be lost on approximately 7 acres occupied by oil and gas wells and related facilities.

Access from the railroad bed would continue to be available from the south (Rock Springs). Dune buggies and other 4-wheel-drive vehicles would continue to use the railroad bed and 3 miles of existing trails. Off-highway vehicles would drive into the part of the WSA and unwittingly enter the 16,280-acre wilderness area. Naturalness would be lost by creating visible trails in partially stabilized dunes. Approximately half of the Flockets (freshwater ponds) would be outside the area designated. They would be vulnerable to disturbance from OHVs or other activities.

Solitude

Solitude would be preserved in the 16,280-acre area designated because wilderness management precludes all but essential OHV use, reducing the potential for noise from motorized vehicles to disrupt the area's solitude. Wilderness management would preclude oil and gas activities and other wilderness-impairing actions.

Solitude would be lost in the eastern part (2,125 acres) of the WSA, including around the 3 wells (920 acres held by production) for a distance of up to ½ mile away while the wells are in production. The loss in solitude would be apparent when the wells are maintained, serviced, or checked (approximately 80 days per year). Weekly servicing of the well accounts for about 80 percent of the days during which solitude would be affected, primarily by motorized vehicle travel. This servicing would affect solitude for a short period during these days (less than 1 hour).

Solitude would be lost in the eastern part of the WSA (2,125 acres) as a result of drilling of 6 oil and

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gas and wells and motorized vehicle activity on 3 miles of new roads to reach the drill sites. Solitude would also be lost in the northern part of the WSA (3,680 acres) as a result of drilling 3 oil and gas wells and motorized vehicle activity on 1.5 miles of new roads. Solitude would also be lost when OHVs increase use on active dunes.

Access from the railroad bed would continue to be available from the south (Rock Springs). Dune buggies and other 4-wheel-drive vehicles would continue to use the railroad bed and 3 miles of trail creating noise from motorized vehicles. Off-highway vehicles would drive into the part of the WSA not designated and possibly unwittingly into the 16,280-acre wilderness area, impacting solitude in this area.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation would be maintained on 16,280 acres designated because wilderness management precludes all but essential OHV use, leaving the general setting of the area as a more primitive, undisturbed area. There would be no new oil and gas leasing. The limitations on activities eliminating new evidence of the presence of people, would increase a visitor's perception that the area is primitive and undisturbed.

Opportunities for primitive and unconfined recreation would be lost on 2,125 acres in the eastern part of the WSA because 6 oil and gas wells would be drilled and OHVs would use 3 miles of new roads. Primitive and unconfined recreation would also be lost in the northern part of the WSA (3,680 acres) when 3 oil and gas wells are drilled and when OHVs use the 9 miles of trails, 1.5 miles of new roads, or the active dunes. In the western and southern parts of the WSA (not designated under this alternative), the opportunity for primitive and unconfined recreation would be lost due to OHV activity accessing the area from the abandoned railroad bed.

Special Features

The WSA would continue to contain sand dunes ranging from active dunes to partially stabilized dunes.

The designation of 16,280 acres within the WSA would continue to provide valuable habitat for big game (including desert elk), waterfowl, small mammals, and other small animals.

The 1,125-acre western part and the 3,139-acre southern part of the WSA contain some solian ice cells, a substantial number of ponds, and active sand dunes. Oil and gas activities would be conditioned to prevent adverse impacts to these special features. However, OHV use would occasionally adversely impact these special features of the Sand Dunes

WSA. Waterfowl would be greatly reduced in number. Ponds could be polluted by oil if OHVs do not stay far enough away from the ponds.

Conclusion

Naturalness, solitude, opportunities for primitive and unconfined recreation, and special features would continue to be preserved on 16,280 acres. Naturalness, solitude, and opportunities for primitive and unconfined recreation would be lost in the rest of the WSA because of a substantial increase in the use of motorized vehicles in all 10,829 acres not designated and oil and gas activity in the northern, eastern, and southern parts of the WSA. Special features would be preserved throughout the WSA.

Impacts to Oil and Gas Exploration and Production

In the eastern part of the WSA, oil and gas activity on 920 acres of pre-FLPMA leases would continue to occur. Production would occur from the area not designated (10,229 total acres of Federal minerals), including pre-FLPMA leases is estimated to be 56 BCF of natural gas (\$73 million) and 79,230 BBLs of condensate (\$1.5 million). Oil and gas activity is most likely in the eastern part of the WSA where oil and gas has already been found. Most of the oil and gas production in the area occurs to the east of the WSA. This indicates that in the next several years, oil and gas activity would increase in the eastern part of the WSA.

The opportunity to develop the oil and gas resources under Federal administration would be foregone for the long term in the area designated (16,280 acres). A projected 89 BCF of natural gas (\$116 million) and 126,100 BBLs of condensate (\$2.4 million) would be foregone. The eastern parts of the WSA have higher oil and gas potential than the western parts of the WSA; therefore, production is expected to occur in the eastern half of the WSA. This indicates that while there may be 1 exploratory well in the northern part of the WSA, no oil and gas activity is anticipated from that area. The western part of the WSA would not be designated wilderness, but no production is anticipated in that area because it has low potential for production.

Exploration could occur in both the western (1,125 acres) and southern (3,139 acres) parts of the WSA but no production is anticipated.

Conclusion

A projected 56 BCF of natural gas (\$73 million) and 79,230 BBLs of condensate (\$1.5 million) would be recovered from the WSA. A projected 89 BCF of

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natural gas (\$116 million) and 126,100 BBLs of condensate (\$2.4 million) would be foregone. Potential production foregone is about 0.12 percent of the potential production in the Green River Basin (50,000 BCF of natural gas).

Impacts to Wildlife Habitat and Populations

Designation of 16,280 acres of public land as wilderness would protect habitat for elk, deer, and antelope within the area proposed for designation, by limiting human intrusions (especially OHV use and oil and gas activity). Oil and gas activity taking place immediately to east of the WSA would continue to displace big game animals into the WSA, increasing the population in the WSA by about 25 percent. This effect is expected to continue for the long term. This would place a greater pressure on the resources of the WSA, especially vegetation, to support the displaced wildlife. Increased use of OHVs on partially stabilized dunes in the western and southern parts of the WSA would further contribute to a loss of vegetation.

The area not designated (10,229 acres of Federal mineral estate) would have up to 12 wells with approximately 84 acres of surface disturbance due to roads and well pads. After reclamation of dry holes and areas not needed for production (on producing wells), 35 acres of wildlife habitat would be lost for the long term. The cumulative impacts of big game displaced from oil and gas activities to the east of the WSA and the 10,229 acres not designated would place a greater pressure on the habitat of the WSA. The 10,229 acres of the WSA not designated constitute about 1/2 of 1 percent of the Steamboat elk hunt area. Other areas of the larger Steamboat elk hunt area generally receive high use levels by big game.

The railroad bed would remain open to motorized vehicles. Increased use of the area by visitors using motorized vehicles would adversely impact the many ponds in the western and southern parts of the WSA, which provide valuable habitat to both big game and birds. Off-highway vehicles may venture off the railroad bed into the western and southern parts of the WSA creating new trails and disturbing areas close to the ponds. Oil sheen from motorized vehicles would be occasionally anticipated. These would adversely impact aquatic life, generally for the season in which it occurs. Waterfowl would be displaced from the ponds close to the railroad bed. This would reduce the capacity of the area for waterfowl production by up to 50 percent.

Conclusion

Waterfowl and aquatic animals associated with the ponds would be displaced in the western and southern parts of the WSA. Big game populations would probably increase by about 25 percent in the short term as they are displaced from the area east of the WSA. Within 3 to 5 years, carrying capacity will be reached.

Impacts to Recreation Opportunities

The most important impact to recreation opportunities under the Small Partial Wilderness alternative (designation of 16,280 acres) is a reduction in acreage potentially available for OHV recreation using 4-wheel-drive dune buggies and similar vehicles. The Greater Sand Dunes ACEC was designated in part to provide these opportunities. There is an 18,166-acre open OHV area including a parking lot available for use by these recreationists. They are most interested in using active dunes. The open area provides this kind of resource, where the evidence of OHV use disappears in a short time due to blowing and shifting sand. However, there appears to be a demand for an increased open area for this type of recreation. The area designated would be permanently closed to this kind of recreation. The WSA was used by about 300 to 400 visitor-days in this type of recreation prior to its designation as a WSA. Since designation as a WSA about 8 years ago, this use has stopped and is now confined to the 18,166-acre open OHV area.

The 2 miles of trails within the area designated would be closed to motorized vehicles except those associated with valid existing rights. This would eliminate an opportunity for individuals to visit the area using motorized vehicles. Because the sand in this area makes travel by an ordinary 4-wheel-drive vehicle (pickup or jeep) difficult, this use may be up to 25 visitor-days per year.

The opportunity for people to visit the area not designated using the 12 miles of existing trails would continue. These trails generally extend into the boundary of the sandy areas from the more heavily used roads and trails, including the road leading to the OHV parking area and the abandoned railroad bed. Recreation use on some of these roads using motorized vehicles would be up to 250 visitor-days annually.

In the short term under wilderness designation, hunter use would remain about the same (70 to 80 hunter-days annually). The number of hunter-days spent in the WSA would increase to approximately

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100 annually as the population of big game in the WSA increases as a result of displacement of big game due to oil and gas activities east of the WSA. When oil and gas activity begins in the area not designated, all of this increase in hunter use would occur in the 16,280-acre area designated. Due to the increase in the number of big game displaced by oil and gas activity to the east of the WSA, there would be a short-term increase in the quality of the hunting experience and a potential increase in success. As carrying capacity of the WSA is reached and numbers decline due to increased disturbance to vegetation and increased human presence, hunting quality would be reduced and hunter use would decline to current levels.

Motorized vehicle use would be eliminated from the area designated (16,280 acres). This would have an adverse impact on motorized recreation vehicle enthusiasts who used the area designated before it became a WSA. This loss of OHV use would be accommodated in the 18,166-acre open OHV area to the east of the WSA. However, some users would have to drive long distances (up to 50 miles) to get to the open area because of access limitations caused by the wilderness area (with a prohibition against motorized vehicles).

Motorized vehicle use on the railroad bed to access the western part of the WSA would continue at current levels of 200 to 250 visitor-days annually. In the area recommended for designation, visitor use for nonmotorized recreation not associated with hunting (e.g., hiking, photography) would continue to be 500 to 600 visitor-days annually.

Some OHV use would resume in the northern part of the WSA but it would be minimal because the northern part of the WSA does not have the acreage or the active dunes demanded by OHV recreationists. The eastern part of the WSA contains dunes and would be used by OHV recreationists where there are no conflicts with oil and gas activities. Due in part to the increased acreage available for OHV recreation, the opportunity for OHV recreation would continue to meet demand for OHV recreation.

Approximately 40 percent of OHV users (90 to 100 annually) displaced from the WSA, would use the part of the WSA not designated. The railroad bed would be open to motorized vehicles and would account for about 25 percent of the displaced users (50 to 60 annually). Approximately 50 percent of the hunters displaced from the area designated (12 to 20) would use the area not designated. The lower percentage for off-highway vehicle enthusiasts is due to the existence of the open OHV area near the WSA. Most displaced recreationists would use the open area.

Overall, recreation use of the area designated is expected to decrease in the short term (approx-

mately 300 visitor-days annually) with the change from some motorized to all nonmotorized use. Recreation use in the vicinity of the WSA is expected to increase because of the shift of users from the WSA into nearby areas, increased regional demand, the perceived added diversity if the area proposed is designated as wilderness, and the establishment of the open OHV area.

Conclusion

Hunting opportunities would remain the same in the short term (70 to 80 hunter-days annually). Opening the railroad bed to motorized vehicles would, in the short term, increase hikers by about 50 percent (100 to 125 visitor-days annually). In the long term, hiker use would increase by 100 to 125 visitor-days annually. In the short term, an overall reduction in use of approximately 200 visitor-days annually would occur because of the elimination of motorized vehicles. In the long term, recreation use would increase to 50 percent above current levels.

Impacts to Livestock Grazing

The current level of 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. The designation of 16,280 acres of public land within the Sand Dunes WSA as wilderness would not affect livestock numbers. Routine maintenance is not currently performed on sources of livestock water. If maintenance is needed in the future, it would be considered on a case-by-case basis. The use of motorized vehicles for maintenance activities would also be considered on a case-by-case basis. Surface disturbance due to oil and gas operations and OHV use on the area designated would be eliminated except for valid existing rights. However, there would be a greater degree of disturbance to vegetation and livestock grazing operations than under the Proposed Action, due to increased OHV activity.

Both oil and gas activities and recreational OHV use would occur mostly in the eastern part of the WSA. Since this is a small area (2,125 acres) and both oil and gas activities and OHV use currently occur just outside the eastern boundary of the WSA, increased use on this area would not adversely affect livestock grazing.

Conclusion

The current level of 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. Restrictions on the use of motorized vehicles would result in an occasional inconvenience to the livestock operator.

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All Wilderness (27,109 acres designated)

As a result of designating the entire 27,109 acres of public land (including 600 acres of split estate), there would be adverse impacts to oil and gas production and recreation.

Impacts to Wilderness Values

Naturalness

Naturalness would be preserved on the entire 27,109-acre wilderness area, except for the 920 acres of pre-FLPMA leases in the eastern part of the WSA because wilderness management precludes all but essential OHV use in connection with valid existing rights and prohibits oil and gas leasing. Wilderness management would preclude oil and gas activities and other wilderness impairing actions, except those associated with valid existing rights (on the 920 acres held by production).

Thirteen miles of trails and 7.6 miles of railroad bed would be closed to motorized vehicles. Because of the sandy nature of the area, these trails would revert to near their natural condition quickly if they are not used. The reduction of opportunities for wilderness impairing actions to take place would help preserve naturalness.

Solitude

Solitude would be preserved on all but 920 acres of the 27,109-acre wilderness area inside the WSA boundary because wilderness management precludes all but essential OHV use, reducing the potential for noise from motorized vehicles to disrupt the area's solitude. It would be enhanced by the closure of the 14 miles of trails and 7.6 miles of railroad bed to motorized vehicles. Wilderness management would preclude oil and gas activity and other wilderness impairing actions, except those associated with valid existing rights (on 920 acres held by production).

Primitive and Unconfined Recreation

The most important primitive and unconfined recreation use of the Sand Dunes WSA is for hiking, photography, and environmental education. These opportunities would be maintained on all but 920 acres of the 27,109-acre wilderness area.

Opportunities for primitive and unconfined recreation would be maintained because wilderness man-

agement precludes all but essential OHV use, leaving the general setting of the area as a more primitive, undisturbed area. There would be no new oil and gas leasing, and oil and gas activities would be limited to the 920 acres held by production. These limitations on activities eliminating new evidence of the presence of people would increase a visitor's perception that the area is primitive and undisturbed.

Special Features

The ponds and eolian ice cells associated with the Sand Dunes WSA would be preserved under the All Wilderness alternative. The WSA would continue to contain sand dunes ranging from active dunes to partially stabilized dunes. The designation of 27,109 acres within the WSA would continue to provide valuable habitat for big game (including desert elk), waterfowl, small mammals, and other small animals.

Conclusion

Naturalness, solitude, opportunities for primitive and unconfined recreation, and special features would be preserved in the entire WSA except on 920 acres of pre-FLPMA leases where oil and gas activities, including operation and maintenance activities on the existing well, would disrupt solitude.

Impacts to Oil and Gas Exploration and Production

Oil and gas activity on 920 acres of pre-FLPMA leases would continue to occur, producing an estimated 5 BCF of natural gas (\$6.5 million) and 7,126 BBLs of condensate (\$135,000).

The opportunity to develop the oil and gas resources under federal administration would be foregone for the long term on the 26,509 acres of Federal minerals except for the 920 acres of pre-FLPMA leases held by production. The potential production foregone is estimated at 140 BCF of natural gas (\$182 million) and 198,000 BBLs of condensate (\$3.8 million).

Conclusion

A projected 5 BCF of natural gas (\$6.5 million) and 7,126 BBLs of condensate (\$135,000) would be recovered. A projected 140 BCF of natural gas (\$182 million) and 198,000 BBLs of condensate (\$3.8 million) from 16 producing wells would be foregone. Potential production foregone is about 0.22 percent of the potential production in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat and Populations

Designation of 27,109 acres of public land as wilderness would protect habitat for elk, deer, and antelope on the entire WSA by limiting human intrusions (especially OHV use and oil and gas activity). Oil and gas activity associated with maintenance and production would affect habitat on 920 acres, causing big game to avoid the area surrounding the producing well. Oil and gas activity taking place immediately to east of the WSA would continue to displace animals into the WSA, increasing the population in the WSA by about 33 percent. This will place a greater pressure on the resources of the WSA, especially vegetation, to support the displaced wildlife. Habitat around the ponds would remain undisturbed. Aquatic life would not be affected by designation of 27,109 acres of public land in the WSA. The potential of the ponds for producing waterfowl would be maintained.

Conclusion

Wildlife populations in the WSA would increase by about 33 percent in the short term (3 to 5 years) as they are displaced from the area east of the WSA. Within 3 years, carrying capacity in the WSA would be reached and displaced animals would be further displaced to other areas. The increased population in the WSA would continue for the long term (50 years).

Impacts to Recreation Opportunities

The impacts to primitive and unconfined recreation were discussed under Impacts to Wilderness Values. The most important impact to recreation opportunities under the All Wilderness alternative is a reduction in acreage potentially available for OHV recreation using 4-wheel-drive dune buggies and similar vehicles. The Greater Sand Dunes ACEC was designated in part to provide these opportunities. There is a 18,166-acre open area including a parking lot available for use by these recreationists. They are most interested in using active dunes. The evidence of OHV use disappears shortly after OHVs use the area due to blowing and shifting sand. There is a demand for an increased open area. The WSA was used about 300 to 400 visitor-days in this type of recreation prior to its designation as a WSA. Since designation as a WSA about 8 years ago, this use has stopped and is now confined to the 18,166-acre open OHV area. The WSA would be permanently closed to OHV kind of recreation.

The 14 miles of trails in the wilderness area would be closed to motorized vehicles except those associated with valid existing rights. The 7.6 miles of

abandoned railroad bed would also be closed to motorized vehicles, limiting access to the area. This would eliminate an opportunity for individuals to visit the area using motorized vehicles. Because the sand makes travel by even an ordinary 4-wheel-drive vehicle (pickup or jeep) difficult, this use may be up to 50 to 100 visitor-days per year.

In the short term under wilderness designation, the number of hunter-days would remain about the same (80 to 100 hunter-days annually). The number of hunter-days spent in the WSA would increase to approximately 120 annually as the population of big game in the WSA increases as a result of displacement of big game due to oil and gas activities east of the WSA. Due to the increase in the number of big game displaced by oil and gas activity to the east of the WSA, there would be an increase in the quality of the hunting experience and a potential increase in hunting.

All motorized vehicle use would be eliminated. This would have an adverse impact on motorized recreation vehicle enthusiasts who used the part of the area designated before it became a WSA. This loss of motorized (OHV) use is expected to be accommodated on the 18,166-acre open OHV use area to the east of the WSA. However, some users would have to drive long distances (up to 50 miles) to get to the open area because of the access limitations caused by the existence of the wilderness area (with a prohibition against motorized vehicles).

About half of the 200 to 250 individuals who access the WSA from the railroad bed to the west of the WSA would cease to use the area. The remainder would access the WSA from other locations. This amounts to a short-term reduction of 100 to 125 visitor-days in the vicinity of the WSA. In the long term, hiker use would increase slightly (100 to 125 visitor-days annually) over current levels because of the unique values in the Sand Dunes and the solitude preserved by eliminating motorized vehicles and oil and gas activities. In the area designated, visitor use for non-motorized recreation not associated with hunting (e.g., hiking, photography) would be 500 to 600 visitor-days annually.

Overall, recreation use of the WSA is expected to decrease in the short term (approximately 300 visitor-days annually) with the change from some motorized to all nonmotorized use. Recreation use in the vicinity of the WSA is expected to increase because of: (1) the shift of users from the WSA into nearby areas, (2) an increased regional demand, (3) the diversity of the area designated, and (4) the existence of the open OHV area.

Virtually all of the OHV users (375 to 400 visitor-days annually) displaced from the WSA, would use the adjacent open OHV area. The closure of the railroad bed to motorized vehicles would account for

SAND DUNES WSA

approximately 200 to 250 of the displaced visitor-use days shifting to the OHV open area and other nearby areas.

In the long term, overall recreation use in the WSA would increase 50 percent above current levels because of increased regional demand, the perceived added diversity of the area, the existing open OHV area adjacent to the WSA, increased hunting quality, hiking, diverse wildlife photography opportunities, and other wilderness attractions.

Conclusion

Hunting opportunities would remain the same in the short term (80 to 100 hunter-days annually). Closure of the railroad bed to motorized vehicles would, in the short term, reduce hikers by about 50 percent (100 to 125 visitor-days annually). In the long term, hiker use would increase by 100 to 125 visitor-days annually. In the short term, an overall reduction of 375 to 400 visitor-days annually would occur because of the elimination of motorized vehicles. In the long term, recreation use would increase to 50 percent above current levels.

Impacts to Livestock Grazing

The current level of 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. Routine maintenance is not performed on the water sources in the WSA. If maintenance is needed in the future, it would be considered on a case-by-case basis. The use of motorized vehicles to perform maintenance would also be considered on a case-by-case basis. Surface disturbance due to oil and gas operations and OHV use on the area designated would be eliminated. This would help to conserve the vegetation resource. The elimination of OHV recreation would reduce disruption to grazing management practices and disturbance to livestock from OHVs using partially stabilized dunes, areas around the ponds, or other areas where livestock may congregate.

Conclusion

The current level of 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. Restrictions on motorized vehicles would occasionally inconvenience the livestock operator.

No Wilderness (No Action)

As a result of not designating any of the 27,109-acre WSA, there would be adverse impacts

on wilderness values, wildlife, primitive and unconfined recreation, and livestock grazing.

Impacts to Wilderness Values

Naturalness

Naturalness would be lost on the entire 27,109-acre WSA. The loss in naturalness would be due to oil and gas activity on 210 acres and to increased OHV use.

Solitude

Solitude would be lost on the entire 27,109-acre WSA. In the eastern part of the WSA, the loss in solitude would be due to oil and gas activity and increased OHV use. In the western and southern parts of the WSA, the loss in solitude would be due mostly to an increase in OHV use. The loss in solitude in the western and southern parts of the WSA due to increased OHV use would occur mostly during the spring, summer, and fall when the weather is better for outdoor recreation. This would be the time that demand for nonmotorized use of the WSA would be highest.

Primitive and Unconfined Recreation

Primitive and unconfined recreation would be adversely affected in the entire WSA. The elimination of the closure for motorized vehicles would result in a substantial increase in use of the WSA by dune buggies and similar vehicles. This increased use would adversely affect all types of primitive and unconfined recreation in the WSA. The level of satisfaction in the recreation experience for primitive and unconfined recreation would be significantly reduced and there would be some increased safety hazards resulting from conflicts between people engaged in nonmotorized recreation and those using OHVs in the moving and partially stabilized dunes. These factors would result in a lower level of use of the WSA for primitive and unconfined recreation.

Special Features

The WSA would continue to contain sand dunes ranging from active dunes to partially stabilized dunes. The ponds and waterfowl and other wildlife associated with the ponds in the 1,125-acre western part and the 3,779-acre southern part of the WSA also would be adversely affected by OHV use. The OHV use would adversely impact some eolian ice cells. Waterfowl and other shorebirds would be greatly reduced in number, if motorized vehicle

SAND DUNES WSA

access is open on the railroad bed and side trails. Ponds could be polluted by oil if OHVs do not stay far enough away from the ponds.

Conclusion

Solitude would be lost in the entire WSA because of the increase in motorized vehicle use. Naturalness would be lost in areas where the dunes are partially stabilized but would be preserved in the active dunes which shift to cover disturbances. Opportunities for primitive and unconfined recreation would be lost because of the substantial increase in the use of motorized vehicles. The WSA's special features would be mostly preserved.

Impacts to Oil and Gas Exploration and Production

Oil and gas leasing would resume in the entire WSA (26,509 acres of Federal mineral estate). Total recoverable reserves, including the existing leases held by production, are estimated at 145 BCF of natural gas (\$189 million) and 205,320 BBLs of condensate (\$3.9 million).

Lease stipulations would include restrictions on surface-disturbing activities in crucial wildlife habitat during critical periods, restrictions on surface-disturbing operations near live water, requirements for timely reclamation of disturbed areas, and exploration and development activities would be conditioned to avoid sage grouse leks and disturbance within 500 feet of live water (ponds). Seasonal restrictions would be used to protect crucial wildlife habitat during important time periods. Aboveground facilities would be painted to blend with surrounding landscape. A total of 30 oil and gas wells would be drilled. The success ratio in the eastern part of the WSA is expected to be 54 percent, while the success ratio for wells in the western, southwestern, and northwestern parts of the WSA are expected to be lower.

Conclusion

A projected 145 BCF of natural gas (\$189 million) and 205,320 BBLs of condensate (\$3.9 million) from 16 producing wells would be recovered.

Impacts to Wildlife Habitat and Populations

Human activity, which is expected to increase due to increased oil and gas exploration and production and increased OHV use of the WSA, would cause avoidance of the area by big game and adverse

impacts to other wildlife characteristic of the area. During winter and calving and fawning seasons, when natural stress factors are at a maximum, human activity would cause stress and movement away from crucial habitat and result in detrimental effects on big game populations.

While oil and gas leases would be conditioned to preclude surface-disturbing activities during crucial periods, the maintenance and operation of producing wells would still be needed on about a weekly basis throughout this period. The effect of these maintenance and operation activities would be relatively minor. However, if none of the WSA is designated wilderness, OHVs like snowmobiles and dune buggies would use the area even during these critical periods for wildlife. OHV use would have the greatest adverse impacts during calving and fawning.

The surface disturbance associated with oil and gas exploration and production, loss of effective habitat, human intrusions, and harassment would adversely affect the desert elk herd and may cause them to abandon the area.

Big game numbers would increase in the short term (3 to 5 years) as they are displaced from the area east of the WSA by ongoing oil and gas activities. As oil and gas activity begins in the WSA, abandonment of parts of the WSA would occur. However, the WSA is only a small part of the Steamboat elk hunt area. Big game are currently displaced from areas to the east of the WSA. This would continue and the activity in the eastern part of the WSA, would result in additional displacement. Populations would be reduced by 50 percent in the long term in the WSA due to oil and gas development and OHV use.

Motorized vehicles and human activity in parts of the WSA near the railroad bed would cause a substantial reduction in the use of some ponds. Due to the lack of availability of similar habitat in the general area of the WSA, this would reduce the numbers of birds by about 50 percent.

The railroad bed would remain open to motorized vehicles. Increased use of the area by visitors using motorized vehicles would adversely impact the many ponds in the western (1,125 acres) and southern (3,139 acres) parts of the WSA, which provide valuable habitat to both big game and birds. Off-highway vehicles may venture off the railroad bed into the western and southern parts of the WSA creating new trails and disturbing areas close to the ponds. Oil sheen from motorized vehicles would be occasionally anticipated. These would adversely impact aquatic life, generally for the season in which it occurs. Waterfowl would be displaced from the ponds close to the railroad bed. This would reduce the capacity of the area for waterfowl production by up to 50 percent.

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Conclusion

Big game numbers in the WSA would increase in the short term (3 to 5 years) as they are displaced from areas to the east of the WSA. Big game numbers would be reduced by 50 percent in the WSA in the long term due to disturbance from oil and gas activities and increased activity associated with OHVs. The numbers of birds using the area would be reduced by about 50 percent.

Impacts to Recreation Opportunities

The impacts to primitive and unconfined recreation were discussed under Impacts to Wilderness Values.

The most important impact to recreation from the No Wilderness alternative is that there would be increased acreage potentially available for use by OHVs. While the currently designated open area for OHVs appears to be adequate for the current level of use, people who use OHVs perceive a need to have a larger area designated as "open" for use by OHVs. The No Action alternative would respond to these requests. It would relieve the pressure on currently more heavily used areas and would result in a greater degree of satisfaction in the OHV recreation experience.

The 14 miles of trails would remain open to motorized vehicles. People who could not access the area, other than by using motorized vehicles, would be able to enjoy the WSA.

Due to an anticipated increase in surface disturbance and a reduction in hunting quality, it is anticipated that in the long term, the number of hunter-days would be reduced from about 80 hunter-days annually to about 20 hunter-days annually.

Conclusion

The use of the WSA for OHV recreation would increase by about 175 to 275 visitor-days annually. The WSA would be accessible to people using motorized vehicles on existing trails in the WSA (approximately 50 to 100 visitor-days annually). Hunter use would decrease from about 80 hunter-days annually to about 20 hunter-days annually.

Impacts to Livestock Grazing

The current level of 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. Existing range improvements in the WSA would be maintained, as necessary. However, there would be a greater degree of disturbance to vegetation and livestock grazing operations due to increased oil and gas activity and increased OHV use.

The increases in oil and gas activity and recreational OHV use would be heaviest on the eastern part of the WSA (2,125 acres). Increased OHV use may also be heavy in the southern part of the WSA (3,139 acres) and in the western part (1,125 acres) adjacent to the railroad bed. Increased use on the moving dunes would have only a minimal adverse impact of livestock grazing. However, increased use on partially stabilized dunes would adversely affect vegetation and harass livestock.

Conclusion

The current level of 913 AUMs for cattle and 835 AUMs for sheep would continue from May 1 to December 14. However, there would be increased disturbance to vegetation and increased harassment of livestock by OHVs.

ALKALI DRAW WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Alkali Draw WSA is in northeastern Sweetwater County about 35 miles northeast of Rock Springs (Map AD-1). The WSA (17,630 acres) consists of 16,990 acres of public land and 640 acres of State land containing a remnant of the Great Divide Basin-Red Desert Area (Map AD-2).

Proposed Action and Alternatives

Two alternatives were analyzed: 1) none of the 16,990-acre Alkali Draw WSA would be wilderness (Proposed Action - No Wilderness - Proposed Action); and 2) all of the 16,990-acre Alkali Draw WSA would be wilderness (All Wilderness).

In the absence of specific resource use proposals for the WSA, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

No Wilderness (Proposed Action - No Action)

The Proposed Action is to designate none of the 16,990-acre Alkali Draw WSA as wilderness. The entire area would be open to oil and gas leasing. There would be a potential for 18 wells to be drilled, resulting in 90 acres of surface disturbance. Motorized vehicles would be limited to 8.5 miles of existing trails and 10 to 12 miles of access roads to oil and gas well sites.

In addition, there are 640 acres of State land (inholding) which contain wilderness values similar to those of the WSA. These lands would be added to the wilderness area in the event they are acquired. The additional lands would result in a more manageable wilderness area.

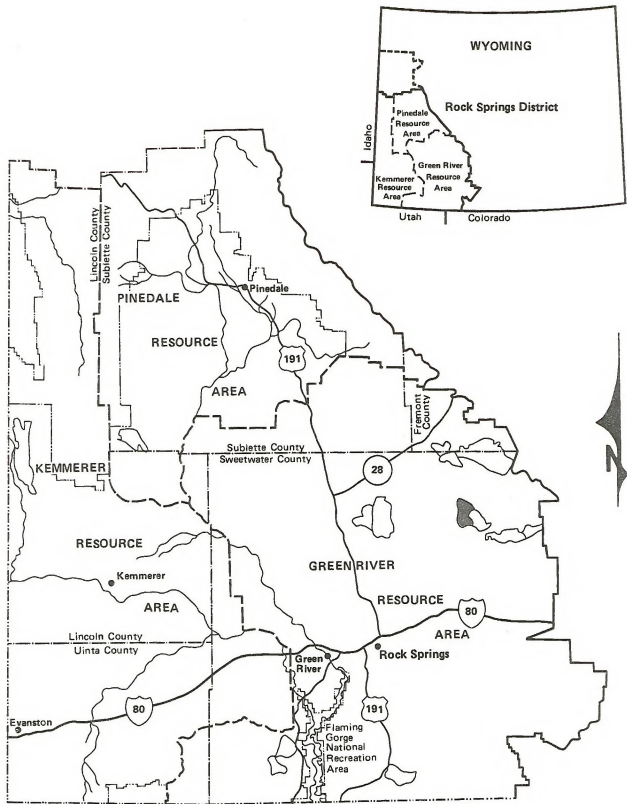
Mineral Resources

Oil and Gas Exploration and Development

Pre-FLPMA leases (Map AD-3) would continue to be subject to valid existing rights (2,705 acres). All of the pre-FLPMA leases are located in the western portion of the WSA. Oil and gas activity on these pre-FLPMA leases would be allowed, and an estimated 5 wells would be drilled, resulting in 25 acres of surface disturbance. This drilling would expand the existing oil and gas field. The field appears to be nearing the limits of the reservoir. Therefore, 2 of these wells are anticipated to be dry holes and 3 would be producing wells. The surface disturbance per well was also reduced from 7 acres to 5 acres, in part because the location of existing trails would reduce the need for long access roads to well sites. Approximately 1.5 acres not needed for production would be reclaimed for each producing well. Two to 3 miles of access roads would be needed to reach oil and gas well sites.

Unleased lands in the remainder of the WSA (14,285 acres) would be offered for lease. The success ratio for wells drilled is about 15 percent, which indicates that intense development and high production is not the most probable scenario. There would be 4 exploratory wells drilled, resulting in 20 acres of surface disturbance. If one of these wells is a producing well, another 9 wells would be needed to develop the reservoir, resulting in an additional 45 acres of disturbance. Seven to 10 miles of access roads would be needed to reach these oil and gas well sites. Based on existing information, more than 4 exploratory wells, in addition to the wells anticipated on pre-FLPMA leases, are not anticipated. The assumption on the number of wells to be drilled in the WSA was based on finding commercial quantities before 4 dry holes are drilled. These changes reduced the number of wells anticipated from 27 (as in the Revised Draft EIS) to 18 and acres disturbed for drilling from 189 to 90 acres.

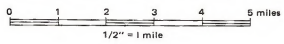
New oil and gas leases and permits for exploration and development on existing leases would be conditioned to protect crucial elk and deer winter habitat (Appendix A). On producing wells, operators would be required to reclaim areas no longer used for production. However, no actions would be taken to compensate for habitat loss.



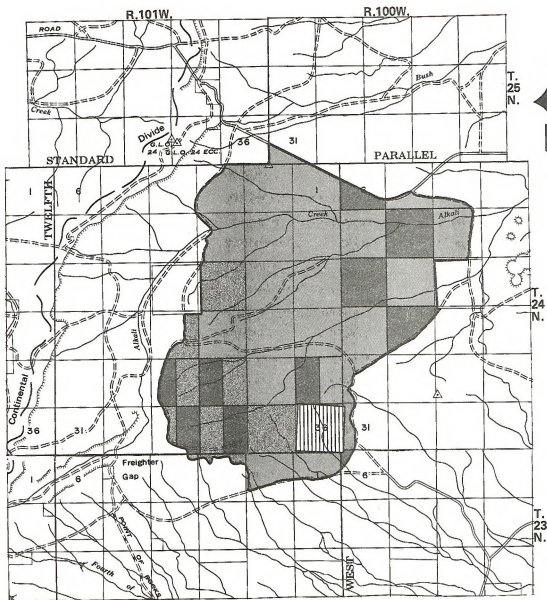
Map AD-1
ALKALI DRAW WSA
 Rock Springs District
 Wilderness Environmental Impact Statement




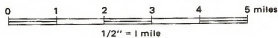
-  Wilderness Study Area Boundary
-  Public Land (Administered by BLM)
-  Private Land
-  State Land
-  Federal Minerals



Map AD-2
LAND AND MINERAL STATUS
 Alkali Draw WSA



-  Wilderness Study Area Boundary
-  Pre-FLPMA Leases
-  Post-FLPMA Leases
-  Not Presently Leased
-  State Minerals



Map AD-3
OIL AND GAS LEASES
Alkali Draw WSA

ALKALI DRAW WSA

Solid Mineral Exploration and Development

No activity related to locatable or leasable minerals is anticipated. Mineral extraction for salables would be allowed subject to stipulations to protect other resources. No activity related to salable minerals is anticipated.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be limited to 8.5 miles of existing roads and trails. An additional 10 to 12 miles of access roads would be constructed to reach oil and gas well sites.

Recreation Use

Hunting would be allowed but the use of motorized vehicles would be limited to 8.5 miles of existing roads and trails. No developments associated with recreation are anticipated. The existing recreation uses in the WSA would remain about the same. The additional 10 to 12 miles of road from oil and gas activities would provide added access for hunting (50 to 60 visitor-days annually) and other recreation (less than 50 visitor-days annually).

Grazing Use

Grazing management practices (Red Desert and Bush Rim grazing allotments) would not change. Within the Alkali Draw WSA, the estimated carrying capacity of 711 AUMs for cattle and 1,117 AUMs for sheep would continue from May 1 to December 15. Some permittees use the area for trailing sheep during the spring and fall. There are no range improvements in the WSA and none are planned. The use of motorized vehicles in connection with range management activities would be limited to existing trails. This use would be occasional and would generally not exceed 2 trips annually into the WSA by ranchers using a pickup truck to check on livestock.

Wildlife Habitat Management

No projects associated with wildlife management are anticipated in the WSA. The area would be managed to provide habitat during crucial winter periods. No actions would be taken to compensate for habitat lost as a result of oil and gas activities.

All Wilderness (16,990 acres designated)

The entire 16,990-acre WSA would be designated as wilderness. Oil and gas leases would not be

issued in the WSA. No surface disturbance on currently unleased BLM-administered lands (14,285 acres) would occur. Oil and gas activity would continue to occur on 2,705 acres of existing leases.

Mineral Resources

Oil and Gas Exploration and Development

Pre-FLPMA leases would continue to be subject to valid existing rights (2,705 acres), and development of the oil and gas resources on these leases would be allowed under those valid existing rights. It is estimated that there would be 5 wells drilled, resulting in 25 acres of surface disturbance. Three wells would be producers, while 2 would be dry holes. When individual wells are authorized, stipulations would be included which would protect crucial elk and deer winter habitat.

Unleased lands in the rest of the WSA (14,285 acres) would not be offered for lease. No oil and gas exploration or development would occur on this portion of the WSA.

Solid Mineral Exploration and Development

No activity related to locatable or leasable minerals is anticipated. Mineral extraction for salables would not be allowed. No activity related to solid minerals is anticipated.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be prohibited, except in connection with valid existing rights (pre-FLPMA leases). Approximately 2 to 3 miles of new access roads would be constructed to reach oil and gas well sites on pre-FLPMA leased acreage.

Recreation Use

As under the Proposed Action, hunting would be allowed except that hunters would not be allowed to use motorized vehicles in the WSA. No developments associated with recreation are anticipated in the WSA. There would be 20 to 30 visitor days annually spent hunting and less than 40 visitor days annually spent in other types of nonmotorized recreation.

Grazing Use

As under the Proposed Action, grazing management practices (Red Desert and Bush Rim grazing allotments) would not change. Within the Alkali Draw WSA, the estimated carrying capacity is 711

ALKALI DRAW WSA

AUMs for cattle and 1,117 AUMs for sheep, with use occurring from May 1 to December 15. Some permittees use the area for trailing sheep during the spring and fall. There are no range improvements and none are planned. The use of motorized vehicles in connection with range management activities would be limited to existing trails. This use would be occasional and would generally not exceed 2 trips annually into the WSA by ranchers using a pickup truck to check on livestock.

Wildlife Habitat Management

Wildlife management would be identical to management under the No Wilderness alternative. When individual wells are authorized, stipulations would be included which would protect crucial elk and deer winter habitat. No actions would be taken to compensate for habitat lost as a result of oil and gas activities.

CHAPTER II - Affected Environment

Introduction

The dominant use of the Alkali Draw area is for livestock grazing, with some hunting and primitive recreation use. The Continental Divide, which creates the Great Divide Basin, is north and west of the WSA. Topography varies from the open "washboard" area of Alkali Draw and its tributaries to Alkali Rim, a steep, rugged area with colorful escarpments. Big sagebrush and grass are the dominant vegetation, with saltbush and greasewood common over portions of the area. The WSA provides important habitat for mule deer, pronghorn antelope, and elk. No ACECs are associated with the Alkali Draw WSA.

Wilderness Values

The Alkali Draw WSA contains 16,990 acres of public land and an additional 640 acres of State land (in the southeast corner of the WSA). The Alkali Draw WSA meets the criteria in Section 2(c) of the Wilderness Act of 1964.

Naturalness

The human intrusions in the WSA consist of 9 two-track trails and 3 well sites. The 2-track trails are

noticeable and are used periodically by livestock operators and recreationists.

Solitude

The "washboard" topographic effect contributes to opportunities for solitude. Several persons could be in the WSA and not be aware of each other due to the topographic screening provided by numerous draws or canyons.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation are available, including hiking, photography, and sightseeing for zoological and geological features. The topographic and geologic features (rims and cliff escarpments) offer challenging hikes and nontechnical climbing opportunities.

Special Features

Eocene fossils (largely snails, clams, and leaves) can be found in several layers of geologic strata, suggesting a former riparian habitat which occurred in the area over 36 million years ago. The gray and yellow coloration associated with the escarpments and the sandstone formations invite geologic exploration. Fossils occur in most of the Wasatch Formation and in the Tipton shale of the Green River Formation.

Mineral Resources

Hydrocarbons are the most valuable potential mineral resource in the Alkali Draw WSA. Extensive drilling was conducted near the southern part of the WSA. The western part of the WSA is in the Treasure Unit, which had a cumulative production of 9,412 barrels (BBLs) of oil and 103,910 thousand cubic feet (MCF) of gas from the Muddy sandstone through 1982 (Wyoming Oil and Gas Commission 1983). The unit was discovered in 1980. Woods Petroleum Corporation has 2 producing wells (shut-in) inside the southwest boundary of the WSA. There are 2,705 acres of pre-FLPMA oil and gas leases in the WSA.

The recoverable reserves per 640 acres in the WSA are estimated at 1.5 billion cubic feet (BCF) of natural gas (38.1 BCF total) and 58,323 barrels (BBLs) of condensate (1,547,892 BBLs total). These figures include possible production from the Lewis, Mesa-verde, Frontier, Mowry, and Muddy formations. The

ALKALI DRAW WSA

success ratio for wells previously drilled in the vicinity of the WSA is 15 percent. The Green River Basin (15,046 square miles) is estimated to contain 3.32 BCF of gas per section (640 acres) or about 50,000 BCF of gas.

The west-central part of the WSA contains sodium sulfate and sodium carbonate. The Alkali Draw WSA is in an area containing coal-bearing strata. No other mineral resources are known to occur within the WSA.

Wildlife

The Alkali Draw WSA provides good wildlife habitat. Mule deer occupy the entire WSA yearlong. They move to the northern boundary during severe winters to occupy the crucial winter range in that part of the WSA. Elk occupy the western portion of the WSA during the summer, and expand their range during the winter to include the entire area. Yearlong pronghorn antelope habitat is found within the WSA.

The Alkali Draw WSA (16,990 acres) constitutes 0.9 percent of the 1,999,076-acre Steamboat elk hunt area; 1.3 percent of the 1,295,248-acre Steamboat mule deer hunt area; and 2.5 percent of the 699,036-acre Dry Lake pronghorn antelope hunt area.

The WSA was surveyed for prairie dog towns. There is potential habitat in the WSA. The WSA was surveyed in 1983 for peregrine falcons. No evidence of aeries or falcons was found. There have been prairie falcon transplants in the vicinity of the WSA. There is no suitable habitat for bald eagle, whooping crane, Colorado squawfish, or humpback chub.

Recreation Opportunities

The primary recreation use is hunting. Estimates of use for the hunt areas in which the Alkali Draw WSA is located include 229 hunter-days in the 1,999,076-acre Steamboat elk hunt area; 1,832 hunter-days in the 1,295,248-acre Steamboat mule deer hunt area; and 463 hunter-days in the 699,036-acre Dry Lake pronghorn antelope hunt area. A total of 50 to 60 hunter-days are spent in the WSA annually.

Currently, OHV use is restricted to 8.5 miles of existing trails. There is very little use off these existing trails, which provide access to most of the WSA for hunting purposes. Other uses are occasional and generally not recurrent. These uses include hiking and photography. The number of visitor-days spent in the WSA for these purposes is very small, under 50 visitor-days annually.

Livestock Grazing

The Alkali Draw WSA is used by both cattle and sheep. There are no range improvements and none are planned. Current use is 711 AUMs for cattle and 1,117 AUMs for sheep from May 1 to December 15. Some permittees use the area for trailing sheep during the spring and fall.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of environmental impacts for the No Wilderness and All Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-5 summarizes the impacts by alternative.

Proposed Action and Alternatives

No Wilderness (Proposed Action - No Action)

The Proposed Action is to designate none of the 16,990-acre Alkali Draw WSA as wilderness. There would be a potential for 18 wells to be drilled in the WSA, resulting in 90 acres of surface disturbance. Motorized vehicles would be limited to 8.5 miles of existing roads and trails. An additional 10 to 12 miles of access roads would be built to reach oil and gas well sites.

Impacts to Wilderness Values

Naturalness

Up to 18 oil and gas wells would be drilled and 10 to 12 miles of access roads would be built. This would result in a loss of naturalness that would not return for 50 years or longer. The 46 acres of surface disturbance from 13 producing oil and gas wells

ALKALI DRAW WSA

TABLE 2-5
SUMMARY OF IMPACTS ALKALI DRAW WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Public Lands Designated	0 acres	16,990 acres
Other Lands	640 acres of State land in WSA.	640 acres of State land would be added, if acquired.
Area of Critical Environmental Concern (ACEC)	None	None
Wilderness Values		
Naturalness	Naturalness would be lost on 90 acres due to drilling of 18 oil and gas wells.	Naturalness would be lost on 25 acres due to drilling of 5 oil and gas wells.
Solitude	Solitude lost in the entire 16,990-acre WSA due to drilling of 18 oil and gas wells and traffic associated with production activities.	Solitude protected on 14,285 acres unleased for oil and gas, and unprotected on 2,705 acres currently leased.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation lost in the entire 16,990-acre WSA due to drilling of 18 oil and gas wells and traffic for production activities.	Opportunities for primitive and unconfined recreation protected on 14,285 acres unleased for oil and gas, and unprotected on 2,705 acres currently leased.
Special Features	Special features (fossils and colorful escarpment) preserved.	Special features (fossils and colorful escarpment) preserved.
Minerals		
Oil and Gas	38.1 BCF (\$49.5 million) of natural gas and 1,547,892 BBLs of condensate (\$29.4 million) produced. No oil and gas production foregone.	Projected production on pre-FLPMA leases of 6.9 BCF of natural gas (\$9 million) and 278,620 BBLs of condensate (\$5.3 million). Projected production foregone on 14,285 acres: 31.2 BCF of natural gas (\$50 million) and 1,269,272 BBLs of condensate (\$24 million).
Well In WSA Not Designated	18	5
Surface Disturbance In WSA Not Designated	90 acres	25 acres

ALKALI DRAW WSA

TABLE 2-5 (Continued)
SUMMARY OF IMPACTS ALKALI DRAW WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Solid Minerals	No potential	No potential
Wildlife Habitat and Populations	Habitat loss for big game and displacement of animals in the entire WSA. Big game numbers would not be affected.	Some loss in big game habitat on 2,705 acres of pre-FLPMA leases. Big game numbers would not be affected.
Recreation Opportunities	Recreational use of the WSA would remain at current low levels. Hunter use would remain at current levels.	Recreation opportunities associated with the use of motorized vehicles would be reduced. Approximately 35 hunter-days would be lost in the WSA.
Livestock Grazing	No effect on grazing use.	No effect on grazing use.

would not be returned to a natural character for 15 to 25 years after the life of the field. The 25 acres of surface disturbance from the 5 dry holes and 19 acres not needed for production on the 13 producing wells would be reclaimed and would approximate natural character 15 to 25 years after the wells are drilled. These activities would take place throughout the WSA; therefore, naturalness would be lost in the entire WSA.

No other actions are proposed in the WSA which would affect naturalness.

Solitude

Solitude would be lost in the entire WSA because of the oil and gas development activities. Motorized vehicles and other activities related to oil and gas exploration and development would disrupt the area's solitude on a regular basis. Since there is already some development in the southwestern portion of the WSA, additional development in that portion of the WSA is considered very likely. Livestock operators would make 2 trips annually into the WSA using motorized vehicles to check on livestock. This activity would result in a negligible loss in solitude.

Primitive and Unconfined Recreation

The primitive and unconfined recreation would be eliminated from the WSA because of the 18 oil and gas wells and 10 to 12 miles of access roads.

Special Features

The area's fossils and colorful escarpments would not be impacted by oil and gas development. No other actions are proposed in the WSA which would affect the WSA's special features.

Conclusion

Naturalness, solitude, and primitive and unconfined recreation would be lost throughout the WSA due to disturbances created by oil and gas exploration and development activities. The area's special features would be mostly preserved.

Impacts to Oil and Gas Exploration and Production

Oil and gas leasing would resume in the entire WSA. The 1 shut-in well and the 13 additional producing wells would produce an estimated 38.1 BCF of gas (\$49.5 million) and 1,547,892 BBLs of condensate (\$29.4 million). While the entire WSA would be open to oil and gas leasing, the western portion of the WSA is where the highest potential for oil and gas exists and is likely to be where the activity would be concentrated.

ALKALI DRAW WSA

Conclusion

Approximately 38.1 BCF of natural gas (\$49.5 million) and 1,547,892 BBLs of condensate (\$29.4 million) would be recovered from the WSA. This constitutes about 0.08 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat

There would also be a short-term loss of 90 acres of wildlife habitat as a result of drilling 18 oil and gas wells. There would be a long-term loss of 46 acres of wildlife habitat from producing oil and gas wells. Noise and human activity would also cause big game to move away from the area. Big game would be displaced from their natural use areas in the WSA. The short-term surface disturbance expected under non-wilderness from all oil and gas wells is 90 acres. The long-term surface disturbance from 13 producing well sites is 65 acres. Because the habitat in the hunt area for antelope (the smallest hunt area in terms of acreage encompassing the WSA) is nearly 700,000 acres, less than 1 percent of the hunt area would be impacted. Therefore, habitat loss resulting from oil and gas activity would be negligible for antelope. The major impact would be the displacement of 10 to 20 percent of the antelope from the WSA.

It is likely that no more than 2 to 3 exploratory wells would be drilled in the next 5 years. These wells would probably be located in the southwestern or western portions of the WSA which is already partially affected by oil and gas activities. As additional wells are drilled over the succeeding 5 years and as production begins, elk (50 to 75 elk) and mule deer (20 to 25 deer) would be displaced. Most of this displacement would probably occur in the western part of the WSA.

Because of the effectiveness of seasonal restrictions during the crucial winter period (Appendix A) on oil and gas activities and the relatively small percentage of the hunt area affected for each species, the overall effect on wildlife would be displacement of big game. Big game numbers (for elk, mule deer, and antelope) in the hunt areas of which the WSA is a part would not be affected because the WSA constitutes less than 3 percent of the hunt area for any big game species.

Conclusion

Mule deer and elk, and 10 to 20 percent of the antelope would be displaced from the WSA during oil and gas drilling. The majority of the displacement would occur in the western part of the WSA.

Impacts to Recreation Opportunities

Motor vehicle use would be limited to 8.5 miles of existing roads and trails and the 15 to 20 miles of additional roads constructed to reach oil and gas well sites.

Disturbances created by oil and gas activities may result in a short-term increase (25 percent) in hunting for pronghorn antelope due to the presence of increased access created by 2 to 3 exploratory wells in the next 5 years. This would increase hunter use of the WSA to about 60 to 70 hunter-days annually and would be attributable mostly to antelope because they are least affected by oil and gas activities.

As additional exploratory wells are drilled in the next 10 years and production begins, there would be some displacement of animals (mostly from the western portions of the WSA), resulting in decreased hunter success. Use is not expected to decline below current levels because the primary big game animal of concern for hunting in the Alkali Draw WSA is pronghorn antelope.

The use of the area for hiking and other nonmotorized uses is expected to remain at its current low levels of approximately 50 visitor-days annually.

Conclusion

Total recreation use in the area is expected to remain at about current levels. These include approximately 50 to 60 hunter-days annually and 50 visitor-days annually for other types of recreation.

Impacts to Livestock Grazing

Livestock management practices (Red Desert and Bush Rim grazing allotments) would not change from those currently in place. Within the Alkali Draw WSA, the estimated carrying capacity of 711 AUMs for cattle and 1,117 AUMs for sheep would continue from May 1 to December 15. Permittees would continue to use the WSA for trailing sheep during the spring and fall. Oil and gas development would improve access to parts of the WSA with an additional 10 to 12 miles of new roads.

Conclusion

There would be no change in livestock management practices in the WSA. There would continue to be 711 AUMs for cattle and 1,117 AUMs for sheep from May 1 to December 15. Permittees would continue to use the WSA for trailing sheep during the spring and fall.

ALKALI DRAW WSA

Unavoidable Adverse Impacts

Displacement of big game from ongoing oil and gas activities on existing oil and gas leases would continue. When the 14,285 acres of currently unleased lands are leased for oil and gas and 18 wells are drilled, displacement of big game would increase. Elk and mule deer would be displaced for up to 10 years. Ten to 20 percent of the antelope would be displaced for up to 5 years. Naturalness, solitude, and opportunities for primitive and unconfined recreation would be lost throughout the WSA.

Irretrievable and Irreversible Commitments of Resources

Approximately an additional 49 acres would be occupied by oil and gas well sites, access roads, and associated facilities.

Short-Term Uses versus Long-Term Productivity

The additional 49 acres occupied by oil and gas facilities would not be available as wildlife habitat or for livestock forage for the life of the wells. The production of approximately 38.1 BCF of natural gas would result in the long-term loss of 49 acres of wildlife habitat and livestock forage, as well as naturalness, solitude, and opportunities for primitive and unconfined recreation throughout the WSA.

All Wilderness (16,990 acres designated)

All of the 16,990 acres in the Alkali Draw WSA would be designated as wilderness. Oil and gas leases would not be issued in the WSA. There would be a potential for 5 wells to be drilled on pre-FLPMA leased acreage, resulting in 25 acres of surface disturbance. Approximately 2 to 4 miles of roads would be constructed to reach oil and gas wells on pre-FLPMA leased acreage.

Impacts to Wilderness Values

Naturalness

Naturalness would be fully protected on 14,285 acres which are currently unleased. Oil and gas exploration and development on the 2,705 acres of pre-FLPMA leases would result in a loss of naturalness on 25 acres in this part of the WSA from 5 oil and gas wells and 2 to 3 miles of access road.

The potential limited vehicle use in connection with range management activities would not result

in existing trails becoming more visible. Consequently, naturalness would not be affected. The adverse effects on solitude would be occasional and short term.

Solitude

Solitude would be fully protected on 14,285 acres which are currently unleased. Oil and gas exploration and development on the 2,705 acres of pre-FLPMA leases would result in a loss of solitude in this portion of the WSA. Noise from human activity in this area would affect solitude in the rest of the WSA, especially the portion of the WSA adjacent to the pre-FLPMA leased acreage.

The potential limited vehicle use in connection with range management activities would not result in existing trails becoming more visible. Consequently, naturalness would not be affected. The adverse effects on solitude would be occasional and short term.

Primitive and Unconfined Recreation

The opportunities for primitive and unconfined recreation would be preserved on 14,285 acres not leased for oil and gas. These opportunities would be lost on the 2,705 acres where there are pre-FLPMA leases.

Special Features

The WSA's fossils and colorful escarpment would be fully preserved.

Conclusion

Naturalness, solitude, and opportunities for primitive and unconfined recreation would be preserved on 14,285 acres and lost on 2,705 acres where there are pre-FLPMA leases. The WSA's special values would be preserved throughout the WSA.

Impacts to Oil and Gas Exploration and Production

There are 2,705 acres of pre-FLPMA leases held by production. Exploration and development would take place on these leases. Oil and gas exploration and development would not take place on the remaining 14,285 acres not under lease.

The opportunity to develop oil and gas resources would be lost for the long term where there are no pre-FLPMA leases held by production (14,285 acres). This potential production is estimated at 31.2 BCF of natural gas (\$50 million) and 1,269,272 BBLS of condensate (\$24 million). Production could still occur on pre-FLPMA leases (2,705 acres) that are

ALKALI DRAW WSA

held by production in the southwestern and western portions of the WSA. This production is estimated at 6.9 BCF of natural gas (\$9 million) and 278,620 BBLS of condensate (\$5.3 million). The opportunity to explore for oil and gas would be lost on 14,925 acres of unleased land.

Conclusion

Approximately 6.9 BCF of natural gas (\$9 million) and 278,620 BBLS of condensate (\$5.3 million) would be recovered. Approximately 31.2 BCF of natural gas (\$50 million) and 1,269,272 BBLS of condensate (\$24 million) would be foregone. This constitutes about 0.02 percent of estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat

Oil and gas activities on 2,705 acres of pre-FLPMA leases held by production would continue to cause a direct loss of habitat (35 acres) and displacement of animals in the long term. This area constitutes only a small portion of the hunt areas for big game (0.4 percent for elk; 0.7 percent for mule deer; 1.0 percent for pronghorn antelope). The 25 acres of short-term surface disturbance (as a result of oil and gas exploration and development drilling) and the 10.5 acres of long-term surface disturbance (as a result of 3 additional producing wells) constitutes less than 1/2 of 1 percent of the WSA.

The hunt area for antelope (the smallest of the hunt areas for big game) contains nearly 700,000 acres. This small acreage, subject to direct disturbance and the human activity resulting in displacement of antelope, is not expected to affect antelope numbers.

Effective habitat loss would be a more important factor for elk and mule deer (up to 20 percent of the WSA may be affected) than for antelope. Twenty percent of the WSA constitutes approximately 0.1 percent of the hunt area for elk and 0.14 percent of the hunt area for mule deer. The greatest potential for oil and gas production is found in the southwestern and western portions of the WSA. This would reduce the cumulative effect to these big game species. The effective habitat loss would be concentrated in an area already experiencing some effective habitat loss due to past activities. This loss would not be significant.

Conclusion

The ongoing displacement of big game, most evident in the southwestern and western portions of the WSA, would continue. There would be no other impacts to big game.

Impacts to Recreation Opportunities

The primitive or wilderness type recreation values and opportunities for solitude would be impacted or lost with the development of pre-FLPMA leases on 2,705 acres (16 percent of the WSA) in the southwestern and western portions of the WSA. Five oil and gas wells would be drilled, 3 of which would be producers. This would result in a total of 4 producing wells in the WSA.

Current recreation activities in the WSA are associated with the topography and general ruggedness of the area. The development of pre-FLPMA leases is expected to reduce visitor use for nonhunting purposes by about 25 percent (approximately 10 visitor-days annually).

Wilderness management would eliminate the use of motorized vehicles within the WSA except for uses associated with the exploration and development of pre-FLPMA leases (an additional 2 to 4 miles of roads). The restriction on vehicle use would decrease hunter use within the WSA by 50 to 60 percent (to approximately 25 to 30 hunter-days annually). The anticipated reduction in hunting is not expected to be greater than 50 to 60 percent because most of the WSA is bounded by roads. Much of the current hunter use is by hunters gaining access to the WSA by using these boundary roads.

Conclusion

There would be a reduction in visitor use of the area for nonhunting purposes (approximately 10 visitor-days annually) and for hunting (approximately 30 hunter-days annually).

Impacts to Livestock Grazing

Livestock management practices (Red Desert and Bush Rim grazing allotments) would not change from those currently in place. Within the Alkali Draw WSA, the estimated carrying capacity of 711 AUMs for cattle and 1,117 AUMs for sheep would continue from May 1 to December 15. Permittees would continue to use the WSA for trailing sheep during the spring and fall. Oil and gas development would improve access to parts of the WSA with an additional 2 to 5 miles of new roads to oil and gas well sites on pre-FLPMA lease lands.

Conclusion

There would be no changes to livestock management practices in the WSA. There would continue to be 711 AUMs for cattle and 1,117 AUMs for sheep from May 1 to December 15. Permittees would continue to use the WSA for trailing sheep during the spring and fall.

SOUTH PINNACLES WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The South Pinnacles WSA is in northeastern Sweetwater County about 35 miles northeast of Rock Springs (Map SP-1). The WSA consists of 10,800 acres of public land in the Red Desert of the Great Divide Basin (Map SP-2).

Since the Final Inventory Report (USDI 1981a), 26 acres of split estate (Federal surface, State minerals) were removed from boundary of the southern portion of the WSA (section 16, T. 23 N., R. 100 W.) because of manageability problems. The acreage analyzed as inside the WSA in the Revised Draft EIS and in this Final EIS is 10,800 acres.

Proposed Action and Alternatives

Two alternatives were analyzed: 1) none of the 10,800-acre South Pinnacles WSA would be wilderness (Proposed Action - No Wilderness - No Action); and 2) all of the 10,800-acre South Pinnacles WSA would be wilderness (All Wilderness).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

Proposed Action (No Wilderness - No Action)

The Proposed Action is to designate none of the 10,800-acre South Pinnacles WSA as wilderness. The entire area would be open to oil and gas leasing, subject to surface protection and rehabilitation requirements to protect other resources.

Mineral Resources

Oil and Gas Exploration and Development

Unleased lands in the entire WSA (10,800 acres) would be offered for lease. New oil and gas leases would be conditioned with stipulations to protect

sage grouse leks. It is estimated that there would be 10 wells drilled, resulting in 70 acres of surface disturbance in the short-term. Five to 7 miles of new roads would be built to oil and gas well sites. Four of the wells are expected to be dry holes and 6 are expected to be producing wells. After the 6 wells go into production, 30 acres would be occupied by oil and gas wells and related facilities for the long-term.

Solid Mineral Exploration and Development

The WSA would be open to locatable minerals; however, no activity related to locatable minerals is anticipated. The area would be open to leasable minerals; however, no interest has been shown and no activity related to leasable minerals is anticipated.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be limited to existing trails and 5 to 7 miles of new roads.

Recreation Use

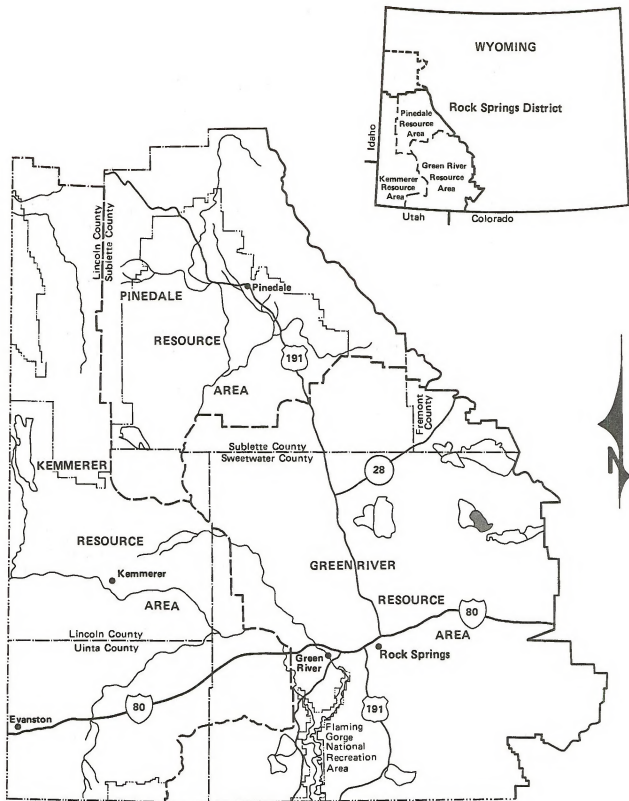
Hunting would be allowed but motorized vehicles would be limited to existing roads and trails. No developments associated with recreation are anticipated. The existing recreation uses in the WSA would remain the same.

Grazing Use

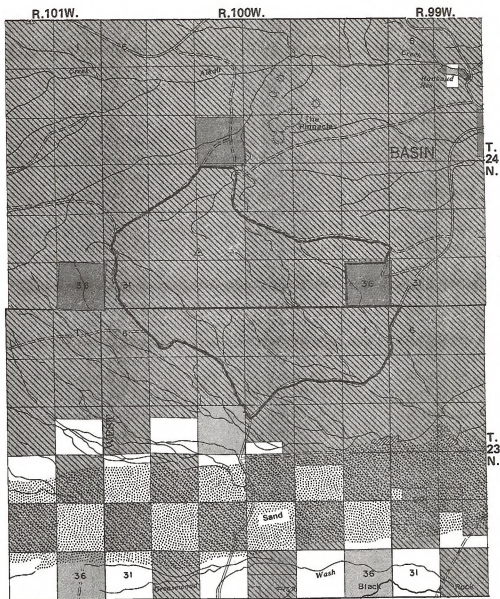
Grazing management practices (Red Desert grazing allotment) would not change from those currently in place. Within the South Pinnacles WSA, the estimated carrying capacity of 644 AUMs for cattle and 779 AUMs for sheep would continue from May 1 to December 15. One permittee uses the allotment for trailing sheep during the spring and fall. There are no range improvements in the WSA and none are planned. The use of motorized vehicles in connection with range management activities would be allowed. This use would be occasional with a pickup truck or similar vehicle to check on livestock.


Wildlife Habitat Management

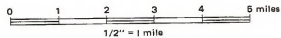
No actions associated with wildlife management are anticipated in the WSA. Existing habitat would be managed to maintain existing populations of wildlife. Reclamation of disturbed areas would be required, but no special measures would be taken to offset habitat loss due to development activities. New oil and gas leases would be conditioned with stipulations to protect sage grouse leks.



Map SP-1
SOUTH PINNACLES WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



-  Wilderness Study Area Boundary
-  Public Land (Administered by BLM)
-  Private Land
-  State Land
-  Federal Minerals



Map SP-2
LAND AND MINERAL STATUS
 South Pinnacles WSA

SOUTH PINNACLES WSA

All Wilderness (10,800 acres designated)

The All Wilderness alternative is to designate all of the 10,800-acre South Pinnacles WSA as wilderness. There would be no oil and gas leases issued in the WSA. Motorized vehicles would be prohibited in the WSA.

Mineral Resources

Oil and Gas Exploration and Development

Unleased lands in the South Pinnacles WSA would not be leased. There are no pre-FLPMA oil and gas leases in the South Pinnacles WSA. There would be no disturbance associated with the exploration or development of oil and gas resources.

Solid Mineral Exploration and Development

The WSA would be closed to locatable, leasable, and salable mineral activity.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be prohibited in the WSA, except for emergency purposes or limited use in connection with grazing management practices.

Recreation Use

Hunting would be allowed (as under the Proposed Action), except that hunters would not be allowed to use motorized vehicles in the WSA. No developments associated with recreation are anticipated in the WSA.

Grazing Use

Grazing management practices (Red Desert grazing allotment) would not change from those currently in place. Within the South Pinnacles WSA, the estimated carrying capacity of 644 AUMs for cattle and 779 AUMs for sheep would continue from May 1 to December 15. One permittee uses the allotment for trailing sheep during the spring and fall. There are no range improvements in the WSA and none are planned.

Wildlife Habitat Management

No developments associated with wildlife management are anticipated in the WSA.

CHAPTER II - Affected Environment

Introduction

The dominant use of the South Pinnacles area is for livestock grazing, with some hunting and primitive recreation use. The otherwise flat topography is broken by rimrocks and ridges running east and west across the WSA. Big sagebrush is the dominant vegetation, with grasses and saltbush being common over much of the area. The WSA contains important habitat for antelope and elk. There are no ACECs associated with the WSA.

Wilderness Values

The BLM determined that the 10,800-acre South Pinnacles WSA (entirely public land) met the criteria established in Section 2(c) of the Wilderness Act of 1964.

Naturalness

There are 6 seismograph trails in the WSA. Only 1 trail runs all the way through the midsection of the WSA. The other 5 two-track trails run along the WSA boundary or only intrude a short distance into the WSA. Only 2 of the 2-track trails are noticeable. The 1 two-track trail which enters the WSA is very faint, washed out, and considered to be a very minor intrusion. The 2-track trails total 6.2 miles within the WSA borders. There is an abandoned drill site approximately 50 yards within the WSA (section 9, T. 23 N., R. 100 W.), but it is substantially unnoticeable except for the dry hole marker on the site. Overall, most of the WSA shows very few signs of human activity.

Solitude

The rimrock area provides outstanding opportunities for solitude. The numerous pockets and small draws provide excellent opportunities to avoid the sights and sounds of other people.

Primitive and Unconfined Recreation

Primitive and unconfined recreation opportunities exist, mainly in the rimrock portion of the WSA.

SOUTH PINNACLES WSA

These include wildlife observation and photography, and rockhounding. Other opportunities available in the WSA are observation and photography of the many geologic ecosites within the rimrock area.

Special Features

Wildlife is the primary special feature of the South Pinnacles WSA. The WSA contains pronghorn antelope and occasional elk and mule deer.

Mineral Resources

The total recoverable reserves estimated to exist within the 10,800-acre WSA is 24.8 billion cubic feet (BCF) of natural gas and 902,134 barrels (BBLS) of condensate. The recoverable reserves per 640 acres are estimated at 1.5 BCF of natural gas and 902,134 BBLS of condensate. The recoverable reserves in the Green River Basin (15,046 square miles) is about 50,000 BCF of gas.

Between 1962 and 1971, several dry holes were drilled north of the Woods Petroleum well, and Anadarko Production recently drilled a dry hole 1 mile east of the WSA eastern boundary. A dry hole was drilled 1 mile west of the WSA western boundary. Another dry hole was drilled by Woods Petroleum immediately to the north of the WSA (section 22, T. 24 N., R. 100 W.). There are no pre-FLPMA leases in the WSA.

No other mineral resources are known to exist in the WSA.

Wildlife

The WSA provides important spring, summer, and fall habitat for antelope, and provides quality fall hunting for this species. Some deer are found in the WSA and a portion of the area is important elk winter habitat. Limited hunting opportunity is available for these species because few of the animals are in the area during the hunting season. The South Pinnacles WSA (10,800 acres) constitutes 1.5 percent of the Dry Lake Antelope Hunt Area (699,036 acres).

The WSA has not been surveyed for prairie dog towns. There is potential habitat in the WSA. The WSA was surveyed in 1983 for peregrine falcons and no evidence of aeries or falcons was found. There is no suitable habitat for bald eagle, whooping crane, Colorado squawfish, or humpback chub.

Recreation Opportunities

There are approximately 463 hunter-days spent annually in the Dry Lake Antelope Hunt Area (699,036 acres). The South Pinnacles WSA represents 1.5 percent of the hunt area. There are fewer than 100 visitor-days per year spent in the WSA (including hunting). Approximately half of this total is for hunting.

Livestock Grazing

The primary use of the WSA is for trailing sheep during the spring and fall. Current grazing use is 644 AUMs for cattle and 779 AUMs for sheep from May 1 to December 15. There are no range improvements in the WSA and none are planned. The current use of the WSA for trailing makes it unlikely that range improvements would be needed to maintain current livestock numbers.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of the environmental consequences of the No Wilderness (Proposed Action) and All Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-6 summarizes the impacts by alternative.

Proposed Action and Alternatives

Proposed Action (No Wilderness - No Action)

The Proposed Action is to designate none of the 10,800-acre South Pinnacles WSA as wilderness. Oil

SOUTH PINNACLES WSA

TABLE 2-6
SUMMARY OF IMPACTS SOUTH PINNACLES WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Public Lands Designated	0 acres	10,800 acres
Other Lands	None	None
Area of Critical Environmental Concern (ACEC)	None	None
Wilderness Values		
Naturalness	Naturalness would be lost on 70 acres due to oil and gas activity.	Naturalness would be protected in the entire WSA.
Solitude	Solitude lost in the WSA due to increased motorized vehicle activity associated with oil and gas and to additional activity on new access roads.	Solitude would be protected in the entire WSA.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation would be lost due to increased human activity.	Opportunities for primitive and unconfined recreation would be protected in the entire WSA.
Special Features	Big game are the primary special feature affected. There would be avoidance during oil and gas drilling; however, seasonal stipulations to protect wildlife would be added to oil and gas leases.	Special features would be protected in the entire WSA.
Minerals		
Oil and Gas	Recoverable reserves: 24.8 BCF of natural gas (\$2 million) and 902,134 BBLs of condensate (\$1 million).	24.8 BCF of natural gas (\$2 million) and 902,134 BBLs of condensate (\$1 million) foregone.
Wells in WSA Not Designated	10	0
Surface Disturbance in WSA Not Designated	70 acres	0 acres
Solid Minerals	No potential	No potential
Wildlife Habitat and Populations	70-acre loss in big game habitat and displacement of animals. Antelope are the most abundant big game but adaptable to development.	No effect on wildlife.

SOUTH PINNACLES WSA

TABLE 2-6 (Continued)
SUMMARY OF IMPACTS SOUTH PINNACLES WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Wildlife Habitat and Populations (Continued)	Seasonal, stress-related impacts would be mitigated. Big game numbers would not be affected.	
Recreation Opportunities	No effect on recreation opportunities.	Hunter use reduced by 25-50 hunter-days annually due to elimination of motorized vehicles. Sightseeing also reduced
Livestock Grazing	No effect on grazing use.	No effect on grazing use.

and gas leasing would resume in the entire WSA. Motorized vehicles would be limited to existing roads and trails.

Impacts to Wilderness Values

Naturalness

The natural character of the area would be lost as a result of oil and gas exploration and development activities. The lack of topographic relief would cause even minimal oil and gas exploration or development to result in a loss of naturalness in much of the WSA. There are a number of 2-track trails and seismograph lines within the WSA. Increased use of these areas and the construction of 10 to 15 miles of additional roads to access oil and gas well sites would cause virtually all the WSA to lose its wilderness character.

The use of motorized vehicles in connection with range management activities would be occasional and would not affect wilderness values except for the short period of time when the activities are taking place (probably no more than a day or two). These activities would probably not be necessary every year. The occasional use would not result in existing trails becoming more visible.

Solitude

Although the WSA contains 10,800 acres, there is so little topographic relief that the opportunity to retain solitude is limited. If minimal development

occurs within the WSA, wilderness values would be adversely impacted. Due to the relatively flat topography, activities which occur outside the WSA would also result in a loss in solitude in about half of the WSA.

The occasional use of motorized vehicles in connection with range management activities to check on livestock (generally a pickup truck or similar vehicle) would have a minor short-term effect on solitude.

Primitive and Unconfined Recreation

Primitive or wilderness type recreation values and opportunities for solitude would be adversely impacted due to human activity, oil and gas wells and access roads, and noise.

Special Features

The broken rimrocks and ridges which characterize the South Pinnacles WSA would not be affected by surface-disturbing activities. They would remain undisturbed even if oil and gas exploration and development occur in the WSA.

Conclusion

Naturalness, solitude, and opportunities for primitive and unconfined recreation would be lost for the long term due to the impacts of oil and gas exploration and development.

SOUTH PINNACLES WSA

Impacts to Oil and Gas Exploration and Development

Oil and gas leasing would resume in the entire WSA. Oil and gas exploration and development throughout the WSA is expected to increase. It is anticipated that no more than 2 to 3 wells would be drilled annually in the WSA. A projected 24.8 BCF of natural gas (\$2 million) and 902,134 BBLs of condensate (\$1 million) would be recovered from 6 producing wells. The success ratio for wells drilled is expected to be 15 percent. This success ratio is relatively low. It indicates that development may occur but that intense development and high production is not the most probable scenario. This means that the area will most likely be developed well by well rather than by drilling several wells concurrently to develop the field quickly.

Conclusion

The oil and gas reserves recovered from 6 producing wells in the WSA would be 24.8 BCF of natural gas (\$2 million) and 902,134 BBLs of condensate (\$1 million). This constitutes only about 0.05 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat and Populations

There would be a direct loss of 70 acres of wildlife habitat as a result of the oil and gas activities. Displacement is only slightly greater because antelope is the species of concern in the South Pinnacles WSA. Antelope are affected to a lesser degree than other big game species by disturbance (e.g., oil and gas construction and drilling activities). The major impact would be the displacement of animals from their natural use areas due to disturbance from oil and gas exploration and development activities.

The impacts of development to elk and mule deer would be minimal since they are only occasionally found in the WSA. Since the number of wells drilled in the WSA are not expected to exceed 2 to 3 annually, the effects on pronghorn antelope are also expected to be minimal. Due to this small acreage of surface disturbance, and the relatively low sensitivity of pronghorn antelope, oil and gas activities are not expected to result in a change in antelope numbers. The hunt areas for all species of big game are much larger than the WSA and would be capable of supporting the small number of animals that would be temporarily displaced from the WSA.

The biggest single impact of oil and gas activity to big game species would result from constructing

and upgrading 10 to 15 miles of access roads for oil and gas wells, which expose escape cover and feeding areas. Pronghorn antelope, which exhibit a high degree of adaptability to oil and gas development, would be subject to poaching losses. These losses would be minimal and are not expected to affect big game numbers. Operators are required to instruct their employees against poaching and are required to ensure that their employees stay within the law. Regulation of the number of hunting licenses in the area and the harshness of the winter would exert much more control over big game numbers.

Conclusion

Big game numbers would not be affected; however, some displacement of the animals would occur due to oil and gas activities. The major factor affecting big game would be the human activity associated with construction and drilling.

Impacts to Recreation Opportunities

Recreation resources and uses in the WSA would not be significantly impacted as a result of nonwilderness management. Motorized vehicle use would be limited to existing roads and trails. Currently, there is very little use off the existing trails.

Oil and gas access roads would provide added access to the WSA for hunting, but current use is not expected to change because the population of pronghorn antelope (the primary big game species hunted within the WSA) is not expected to change and because most of the WSA is currently accessible within a 2-mile distance from roads which surround the WSA. Since antelope is the big game species hunted, the increased access is not expected to result in increased hunting pressure. Therefore, the attractiveness of the WSA for hunting would remain the same. The additional access would make it easier for visitors using motor vehicles to see the WSA; however, the current level of use is very low and no change is expected. The current level of recreation use of the WSA is fewer than 100 visitor-days annually for all types of recreation. Hunting constitutes the majority of the use.

Conclusion

There would be no effect on recreation opportunities because oil and gas activities are not expected to change the types or levels of recreation uses. The main use would continue to be hunting for pronghorn antelope. Total use levels would continue to be fewer than 100 visitor-days annually.

SOUTH PINNACLES WSA

Impacts to Livestock Grazing

Current grazing use of 644 AUMs for cattle and 779 AUMs for sheep from May 1 to December 15 would continue. There are no range improvements and none are planned. The South Pinnacles WSA is used primarily for trailing. Because of this and the narrow east-west shape of the WSA, motorized vehicles are not used for livestock management. Current uses would continue. Based on these factors, no new range improvements would be needed in the WSA and livestock grazing would not be affected.

Conclusion

Current grazing use of 644 AUMs for cattle and 779 AUMs for sheep from May 1 to December 15 would continue.

Unavoidable Adverse Impacts

Approximately 30 acres would be occupied by 6 producing oil and gas wells and access roads and other facilities associated with oil and gas production.

Irreversible and Irrecoverable Commitments of Resources

There would be no irreversible or irretrievable commitments of resources.

Short-Term Uses versus Long-Term Productivity

Oil and gas facilities would continue to occupy 30 acres in the WSA for the producing life of the wells. However, the long-term productivity of the WSA to maintain current uses (i.e., hunting for pronghorn antelope and livestock trailing) would not be affected.

All Wilderness (10,800 acres designated)

All of the 10,800-acre South Pinnacles WSA would be designated as wilderness. Oil and gas leases would not be issued in the WSA. Motorized vehicles would be prohibited in the WSA.

Impacts to Wilderness Values

Naturalness

There would be no surface disturbance allowed in the WSA. Therefore, naturalness would be preserved. However, wilderness character is limited by the area's openness and the susceptible character of the topography and vegetation to visual intrusions from activities which may take place outside of the WSA. The potential limited vehicle use in connection with range management activities (generally to check on livestock) would not result in existing trails becoming more visible.

Solitude

No surface-disturbing activities would take place. Motorized vehicles would be prohibited. Therefore, solitude would be retained in the entire WSA.

Primitive and Unconfined Recreation

Since no oil and gas leases would be issued and there would be no surface disturbance or activity related to any kind of mineral development, the opportunities for primitive and unconfined recreation would be maintained in the WSA.

Special Features

The broken rimrocks and ridges which characterize the South Pinnacles WSA would not be affected by surface-disturbing activities. They would remain undisturbed even if oil and gas exploration and development occurs in the WSA. However, solitude, naturalness, and opportunities for primitive and unconfined recreation would be lost in the western portion of the WSA.

Conclusion

Naturalness, solitude, opportunities for primitive and unconfined recreation, and special features would be protected in the entire WSA.

Impacts to Oil and Gas Exploration and Production

If the WSA were designated wilderness, no oil and gas leases would be issued. There would be no oil

SOUTH PINNACLES WSA

and gas exploration and production. The opportunity to explore for oil and gas would also be lost. The potential production lost is estimated at 24.8 BCF of natural gas (\$2 million) and 902,134 BBLS of condensate (\$1 million).

Conclusion

There would be no oil and gas production from the WSA. An estimated 24.8 BCF of natural gas (\$2 million) and 902,134 BBLS of condensate (\$1 million) would be foregone. This constitutes only about 0.05 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat and Populations

There are no pre-FLPMA oil and gas leases in the WSA and no new oil and gas leases would be issued. No activity related to salable, leasable, or locatable minerals would be allowed. Therefore, there would be no human activity or surface disturbance associated with mineral development. No changes in recreation or grazing use or use levels are expected. Therefore, wildlife habitat would remain unchanged and no effect on wildlife populations is anticipated.

Conclusion

Wildlife habitat would be protected from disturbance, and wildlife numbers would be preserved.

Impacts to Recreation Opportunities

No development would take place within the WSA; therefore, primitive or unconfined recreation opportunities would be retained unless development

occurs on adjacent land. However, as wilderness-oriented use of the WSA is minimal at present and is not anticipated to increase, this impact would be minor. The prohibition on motorized vehicles would decrease hunter use and sightseeing (presently the major recreation uses) by 10 percent.

Current recreation use of the WSA is fewer than 100 visitor-days annually for all types of recreation, including hunting. This is only a fraction of a percent of the recreation days spent in the vicinity of the WSA for the same types of recreation. Other areas in the region, within similar driving distances, are used to a greater degree and are adequate to absorb the displaced use.

Conclusion

There would be a displacement of approximately 10 visitor-days from the WSA using motorized vehicles.

Impacts to Livestock Grazing

Current grazing use of 644 AUMs for cattle and 779 AUMs for sheep from May 1 to December 15 would continue. There are no range improvements and none are planned. The South Pinnacles WSA is used primarily for trailing; therefore, no new range improvements would be needed in the WSA. Motorized vehicles are not needed in connection with range management.

Conclusion

Current grazing use of 644 AUMs for cattle and 779 AUMs for sheep from May 1 to December 15 would continue. Livestock operators would not be affected by the prohibition on motorized vehicles in the WSA.

ALKALI BASIN-EAST SAND DUNES WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Alkali Basin-East Sand Dunes WSA is in east-central Sweetwater County about 40 miles northeast of Rock Springs (Map AB-1). The WSA consists of 12,800 acres, including a portion of the Killpecker Sand Dunes within the Red Desert-Great Divide Basin (Map AB-2). During the intensive inventory, 2 units were combined and the acreage reduced from 47,130 acres to its current size.

Proposed Action and Alternatives

Two alternatives were analyzed: 1) none of the 12,800-acre Alkali Basin-East Sand Dunes WSA would be wilderness (Proposed Action - No Wilderness - No Action); and 2) all of the 12,800-acre Alkali Basin-East Sand Dunes WSA would be wilderness (All Wilderness).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

Proposed Action (No Wilderness - No Action)

The Proposed Action is to designate none of the 12,800-acre Alkali Basin-East Sand Dunes WSA as wilderness. The entire area would be open to oil and gas leasing. Motorized vehicles would be limited to 8 miles of existing trails and 3 to 5 miles of new roads.

Mineral Resources

Oil and Gas Exploration and Development

Unleased lands in the WSA (12,800 acres) would be offered for lease. It is estimated that there would be 9 wells drilled, resulting in 63 acres of surface disturbance. Because 2 dry holes have already been drilled in the WSA, no more than 3 more dry holes are anticipated. Six of the wells would be producers

and 3 would be dry holes. Approximately 3 to 5 miles of new roads would be required to reach new oil and gas well sites. New leases would be conditioned to restrict disturbance within 500 feet of live water.

Solid Mineral Exploration and Development

There are no known locatable minerals in the WSA; therefore, no activity is expected. The area would be open to leasable and salable minerals; however, no activity is anticipated. This is primarily because the greatest potential is for sand, which is abundant elsewhere from existing sources.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be limited to 8 miles of existing trails and 3 to 5 miles of new roads constructed to reach new oil and gas well sites.

Recreation Use

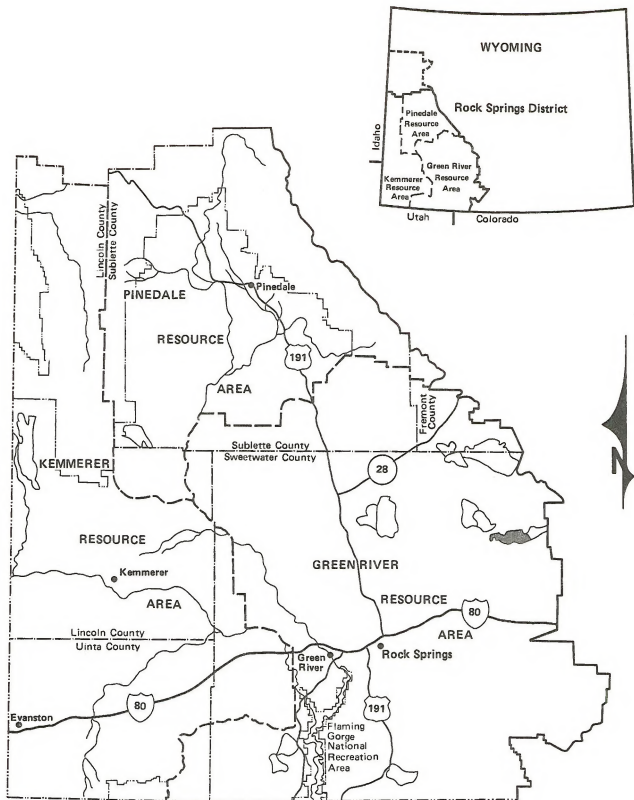
Hunting would be allowed but hunters using motorized vehicles would be limited to 8 miles of existing trails and 3 to 5 miles of new roads. No developments associated with recreation are anticipated in the WSA. The existing recreation uses in the WSA would remain the same.

Grazing Use

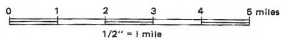
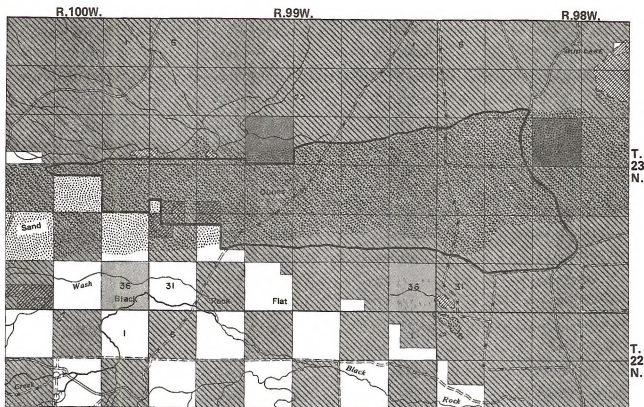
Grazing management practices (Red Desert grazing allotment) would not change from those currently in place. Within the WSA, the estimated carrying capacity of 1,164 AUMs for cattle and 1,158 AUMs for sheep would continue from May 1 to December 15. One permittee uses the allotment for trailing sheep during the spring and fall. There is 1 water well converted from an oil well in section 22, T. 23 N., R. 99 W. No new range improvements are planned. The use of motorized vehicles in connection with range management activities would be allowed. This use would be occasional (generally no more than once or twice annually with a pickup type vehicle) to check on livestock. With 8 miles of existing trails and 3 to 5 miles of new roads, no use is anticipated off these roads.

Wildlife Habitat Management

No actions associated with wildlife management are anticipated in the WSA. Existing habitat would be managed to maintain existing populations of wildlife. New oil and gas leases would be conditioned to restrict disturbance within 500 feet of live water.



Map AB-1
ALKALI BASIN—EAST SAND DUNES WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



Map AB-2
LAND AND MINERAL STATUS
 Alkali Basin-East Sand Dunes WSA

ALKALI BASIN - EAST SAND DUNES WSA

Oil and gas operators would be required to reclaim unused areas disturbed as a result of oil and gas activities. However, no additional actions would be undertaken to compensate for habitat loss as a result of oil and gas exploration and development.

All Wilderness (12,800 acres designated)

All of the 12,800-acre Alkali Basin-East Sand Dunes WSA would be designated as wilderness. There would be no oil and gas leases issued in the WSA and no surface disturbance or human activity associated with oil and gas activities. Motorized vehicles would be prohibited in the WSA, except for emergency purposes or limited use in connection with grazing management practices.

Mineral Resources

Oil and Gas Exploration and Development

Unleased lands in the WSA (12,800 acres) would not be offered for lease. There are no pre-FLPMA oil and gas leases in the Alkali Basin-East Sand Dunes WSA. Therefore, management would not be constrained by this type of valid existing right. No exploration or development would occur.

Solid Mineral Exploration and Development

Mineral extraction for salables and leasables would not be allowed. No other mineral activity is anticipated.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be prohibited in the WSA, except for emergency purposes or limited use in connection with grazing management practices.

Recreation Use

Hunting would be allowed but hunters would not be allowed to use motorized vehicles. There would be almost 25 visitor-days annually for all types of recreation.

Grazing Use

Grazing management practices (Red Desert grazing allotment) would not change from those currently in place. Within the WSA, the estimated car-

rying capacity of 1,164 AUMs for cattle and 1,156 AUMs for sheep would continue from May 1 to December 15. One permittee uses the allotment for trailing sheep during the spring and fall. There is 1 water well converted from an oil well in section 22, T. 23 N., R. 99 W. No new range improvements are planned. Where practical alternatives are not available, the occasional use of motorized equipment could be permitted on a case-by-case basis following an environmental analysis. Legitimate uses would be for the maintenance or replacement of existing improvements or for emergency purposes.

Wildlife Habitat Management

No actions associated with wildlife management or habitat management are anticipated in the WSA.

CHAPTER II - Affected Environment

Introduction

The topography is predominantly rolling sand dunes with elevations varying by only about 100 feet. Much of the WSA is covered by active dunes and devoid of vegetation. Stabilized dune areas are vegetated with big sagebrush, saltbush, and an interesting variety of grasses and forbs. Wildlife in the WSA are pronghorn antelope, small mammals, coyotes, and bobcats. Wild horses frequent the WSA, especially during spring and summer.

The dominant use of the Alkali Basin-East Sand Dune WSA is livestock grazing, with some hunting, primitive recreation, and oil and gas exploration.

No ACECs are associated with the Alkali Basin-East Sand Dunes WSA.

Wilderness Values

The 12,800-acre Alkali Basin-East Sand Dunes WSA (entirely public land) meets the criteria established in Section 2(c) of the Wilderness Act of 1964.

Naturalness

The Alkali Basin-East Sand Dunes WSA is essentially in a natural condition. Human intrusions in the WSA are 3 abandoned well sites, a shut-in gas well,

ALKALI BASIN - EAST SAND DUNES WSA

and 2 two-track trails (approximately 8 miles). At the time of the intensive inventory, the 2-track trails, one of the abandoned well sites, and the shut-in gas well were insignificant to the overall natural character. The other 2 abandoned well sites were temporary disturbances allowed under BLM Interim Management Policy.

Solitude

Many large sand dunes, draws, and ridges in the southern half of the WSA provide excellent natural screening from the sight and sound of others. The dune area provides the best opportunity for solitude.

Primitive and Unconfined Recreation

The area provides opportunities for unconfined recreation, including wildlife photography and observation and hunting. Hunting in the Alkali Basin-East Sand Dunes WSA is mostly for pronghorn antelope and sage grouse.

Special Features

The Killpecker Dunes, the largest active sand dune region in North America, traverse the WSA. This WSA includes a remnant of the Red Desert area of the Great Divide Basin. The region may be of scientific value for the study of active sand dunes, their movements, and how they are stabilized.

Mineral Resources

The primary mineral value in the WSA, as indicated by public interest and industry contacts, is hydrocarbons. Recent exploration for oil and gas centered on the area north of the WSA, where 5 dry holes have been drilled since 1976. Anadarko Production Company has a producing well (presently shut-in) on the northern edge of the WSA in section. 14, T. 23 N., R. 99 W. Two exploratory wells were drilled in the center of the WSA in 1979 and 1980; both were dry holes.

The recoverable reserves per 640 acres in the WSA are estimated at 3.7 billion cubic feet (BCF) of natural gas (73.1 BCF total) and 71,238 barrels (BBLs) of condensate (1,424,763 BBLs total). The success ratio for wells drilled is expected to be 15 percent. This success ratio is relatively low. It indicates that development may occur but that intense develop-

ment and high production is not the most probable scenario. The Green River Basin (15,046 square miles) is estimated to contain about 50,000 BCF of gas.

The Alkali Basin-East Sand Dunes WSA is in an area known to contain coal-bearing strata. No other mineral resources (except for sand, a salable mineral) are known to exist in the WSA.

Wildlife

The Alkali Basin-East Sand Dunes WSA provides fair habitat for wildlife. Valuable pronghorn antelope habitat is found within the WSA. These animals use the area yearlong. The Alkali Basin-East Sand Dunes WSA (12,800 acres) constitutes 1.2 percent of the Table Rock Antelope Hunt Area (1,070,560 acres). The Sands elk herd occasionally inhabits the WSA during the winter months. Coyotes are common throughout the WSA, and bobcats are uncommon residents.

The southern portion of the WSA includes part of the Killpecker Sand Dunes, imparting a rolling landscape to that part of the area. The Alkali Creek portion of the area features draws and ridges that provide relief to the relatively flat and unvaried topography of most of the WSA. The low active dunes are devoid of vegetation, while big sagebrush and rabbitbrush are common on the stabilized dunes. Small wet and dry meadows are found between the dunes.

There are no prairie dog towns in the WSA. There is no suitable habitat for the bald eagle, peregrine falcon, whooping crane, humpback chub, or Colorado squawfish in the WSA.

Recreation Opportunities

There are approximately 1,000 hunter-days spent in the Dry Lake Antelope Hunt Area. Less than 75 visitor-days per year are spent in the WSA for all types of recreation, including hunting.

Livestock Grazing

The Alkali Basin-East Sand Dunes WSA is used primarily for tralling of sheep in the fall and spring. Current grazing use of 1,164 AUMs for cattle and 1,156 AUMs for sheep would continue from May 1 to December 15. There is 1 water well converted from an oil well (section 22, T. 23 N., R. 99 W.).

ALKALI BASIN - EAST SAND DUNES WSA

CHAPTER III - Environmental Consequences

Proposed Action and Alternatives

Introduction

This section contains an analysis of environmental consequences for the No Wilderness (Proposed Action) and All Wilderness alternatives. The actions were analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-7 summarizes the impacts by alternative.

Proposed Action (No Wilderness - No Action)

The Proposed Action is to designate none of the 12,800-acre Alkali Basin-East Sand Dunes WSA as wilderness. Oil and gas leasing would resume in the entire WSA. Motorized vehicles would be limited to 8 miles of existing trails and 3 to 5 miles of new roads to oil and gas well sites.

TABLE 2-7
SUMMARY OF IMPACTS ALKALI BASIN - EAST SAND DUNES WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Public Lands Designated	0 acres	12,800 acres
Other Lands	None	None
Area of Critical Environmental Concern (ACEC)	None	None
Wilderness Values		
Naturalness	Naturalness lost on 63 acres due to oil and gas activity.	Naturalness protected in the entire WSA.
Solitude	Solitude lost in the WSA due to oil and gas activity and motorized vehicles on new access roads.	Solitude protected in the entire WSA.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation lost in the WSA due to increased human activity and low topographic relief.	Opportunities for primitive and unconfined recreation protected in the entire WSA.
Special Features	Special features protected in the WSA.	Special features protected in the entire WSA.
Minerals		
Oil and Gas	73.1 BCF natural gas (\$95 million) and 1,424,763 BBLs condensate (\$27 million) would be recovered.	73.1 BCF natural gas (\$95 million) and 1,424,763 BBLs condensate (\$27 million) would be foregone.
Wells In WSA Not Designated	9	0

ALKALI BASIN - EAST SAND DUNES WSA

TABLE 2-7 (Continued)
SUMMARY OF IMPACTS ALKALI BASIN - EAST SAND DUNES WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Surface Disturbance in WSA Not Designated	63 acres	0 acres
Solid Minerals	No potential	No potential
Wildlife Habitat and Populations	Some loss in habitat and displacement of big game. Impact would be low because of slow rate of development expected. No change in big game numbers in the area.	No effect on big game. Antelope are main big game and would not be affected by slow rate of development.
Recreation Opportunities	No effect on recreation opportunities in the WSA.	No effect on recreation opportunities in the WSA.
Livestock Grazing	No effect on grazing use.	Livestock management practices and numbers would not be affected. Occasional inconvenience to livestock operator due to restriction on motorized vehicle use.

Impacts to Wilderness Values

Naturalness

The natural character of the area would be impaired as a result of oil and gas exploration activities. The surface disturbances caused by oil and gas exploration and development activities would result in a loss in naturalness on 63 acres due to oil and gas well sites and access roads. When the 3 dry holes and areas not needed for production on the 6 producing wells are reclaimed, naturalness would be lost on 30 acres of oil and gas well sites and access roads.

The use of motorized vehicles in connection with range management activities probably not be necessary every year and would not result in existing trails becoming more visible, resulting in a loss in naturalness.

Solitude

Although the WSA contains 12,800 acres, it is relatively flat. The opportunities for solitude are limited because the lack of topographic relief makes sounds from motorized vehicles and construction activities audible throughout the WSA. The dunes in this WSA are relatively low dunes with associated smaller gullies and canyons. Noise from oil and gas activities

and motorized vehicles would result in a loss in solitude in the entire WSA. An estimated 9 oil and gas wells would be drilled in the WSA, along with the construction of 3 to 5 miles of access roads. These activities would take place over several years, therefore, the loss in solitude is viewed as a long-term impact. Activity associated with the 6 producing wells would also result in a loss in solitude once weekly while the well is producing.

The use of motorized vehicles in connection with range management activities would be occasional and would affect solitude no more than a day or two annually.

Primitive and Unconfined Recreation

The primitive or wilderness type recreation values and opportunities for solitude would be lost due to the drilling of 9 oil and gas wells and the construction of 3 to 5 miles of access roads.

Special Features

The dunes constitute the special features in the Alkali Basin-East Sand Dunes WSA. Oil and gas activity may affect some partially stabilized dunes but it is not expected to substantially affect the dynamics of the dune ecosystem.

ALKALI BASIN - EAST SAND DUNES WSA

Conclusion

Naturalness would be lost on 63 acres as a result of oil and gas activities. Solitude and opportunities for primitive and unconfined recreation would be lost in the entire WSA due to oil and gas activities and motorized vehicles. The WSA's special features would be preserved.

Impacts to Oil and Gas Exploration and Production

Oil and gas leasing would resume in the 12,800-acre WSA. Nine oil and gas wells would be drilled. Approximately 73.1 BCF of natural gas and 1,424,763 BBLS of condensate would be recovered from 6 producing wells. This constitutes 0.15 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas). The potential value of oil and gas resources recovered from the WSA is approximately \$95 million for gas and \$27 million dollars for oil.

Conclusion

Oil and gas resources recovered from the WSA would be 73.1 BCF of gas and 1,424,763 BBLS of condensate from 6 producing wells. The potential value of oil and gas resources recovered is approximately \$95 million for gas and \$27 million for oil.

Impacts to Wildlife Habitat

Wilderness values in the WSA would not be protected. There would be some loss of habitat as a result of drilling 9 oil and gas wells, disturbing 63 acres. After areas not needed for production are reclaimed, 40 acres would be occupied by oil and gas facilities. The major impact would be the displacement of animals from their natural use areas. The displacement for antelope would be minimal because they are less sensitive to human activity and because the WSA is yearlong habitat (rather than crucial winter habitat) for antelope. Elk would be displaced up to 1 mile from human activity associated with construction and well drilling activities. Elk occasionally inhabit the WSA during the winter; however, they depend more on other habitat during the crucial winter period. The elk would probably avoid the WSA (less than 1 percent of the elk herd area) when oil and gas development occurs. The effects of displacement for antelope and elk would be less during production.

Since there have been 5 dry holes drilled immediately north of the WSA and 2 dry holes in the WSA, intensive development over a short period of time is not anticipated. This factor would limit the human

activity in the WSA at any one time and would limit the displacement of big game.

Big game displaced from the WSA would move to adjacent areas which are part of the same hunt area. The WSA is yearlong habitat for antelope. It makes up only 1.2 percent of the hunt area for antelope and only a small part of the WSA (slightly over 1 percent) would be directly impacted by oil and gas activities. Impacts to the directly affected portion of the WSA would not occur concurrently and would not be entirely cumulative because they would occur over 10 years of oil and gas activity. Therefore, the nearby areas would be capable of supporting the displaced animals.

Recreation activities in the WSA are not expected to change and would not affect wildlife habitat or populations.

Conclusion

There would be temporary displacement of antelope from parts of the WSA experiencing oil and gas development. Elk would avoid the WSA when oil and gas development occurs.

Impacts to Recreation Opportunities

Recreation opportunities and uses within the WSA would not be significantly impacted. Motorized vehicles would be limited to 8 miles of existing trails and 3 to 5 miles of new roads. Currently, there is very little use off the existing roads or trails. The primary recreation uses, hunting and sightseeing, would not be significantly affected.

Conclusion

There would be no impact to recreation. Recreation use in the area would remain at 75 visitor-days annually.

Impacts to Livestock Grazing

Livestock management practices would not be affected. New roads associated with oil and gas activities would improve access to the WSA, facilitating livestock management. Current grazing use of 1,164 AUMs for cattle and 1,156 AUMs for sheep would continue from May 1 to December 15.

Conclusion

There would be no impact to livestock grazing. Current grazing use of 1,164 AUMs for cattle and 1,156 AUMs for sheep would continue from May 1 to December 15.

ALKALI BASIN - EAST SAND DUNES WSA

Unavoidable Adverse Impacts

Oil and gas well sites and access roads would disturb vegetation on 63 acres. After dry holes and areas not needed for production are reclaimed, oil and gas well sites and access roads would occupy 30 acres, adversely affecting naturalness. Solitude and opportunities for primitive and unconfined recreation would be lost in the entire WSA.

Irreversible or Irrecoverable Commitments of Resources

Approximately 73.1 BCF of natural gas and 1,424,763 BBLS of condensate would be recovered from the WSA. There would be no other irreversible or irretrievable commitments of resources.

Short-Term Uses versus Long-Term Productivity

Approximately 30 acres would be occupied by producing oil and gas well sites, access roads, and associated facilities. These areas would not be productive as wildlife habitat for up to 30 years. After that, long-term productivity on these areas would slowly approach current levels, reaching them in about 50 years. However, current productivity on the stabilized dunes is relatively low, and the 30 acres affected are small in comparison to available habitat nearby.

All Wilderness (12,800 acres designated)

All of the 12,800-acre Alkali Basin-East Sand Dunes WSA would be designated as wilderness. There would be no oil and gas leases issued in the WSA. There would be exploration or developments associated with oil and gas resources. Motorized vehicles would be prohibited in the WSA.

Impacts to Wilderness Values

Naturalness

Oil and gas activities and OHV use would not be allowed in the WSA. Therefore, these activities would not adversely affect the naturalness of the WSA. The potential limited vehicle use in connection with range management activities would probably not result in existing trails becoming more visible.

Solitude

Solitude would be preserved in the WSA because motorized vehicles and development activities would be excluded from the WSA.

Primitive and Unconfined Recreation

The opportunities for primitive and unconfined recreation would be retained in the WSA because of the exclusion of motorized vehicles and oil and gas activities. Such use of the WSA is currently at very low levels and would remain at current levels.

Special Features

The dunes which constitute the special features of the WSA would not be affected because surface disturbance and motorized vehicles would not be allowed.

Conclusion

All of the wilderness values in the WSA would be retained.

Impacts to Oil and Gas Exploration and Production

The opportunity to develop oil and gas resources would be lost for the long term. The potential production lost is estimated at 73.1 BCF of natural gas and 1,424,763 BBLS of condensate. The opportunity to explore for oil and gas resources would also be foregone in the entire WSA. The potential value of oil and gas resources foregone is approximately \$95 million for gas and \$27 million dollars for oil.

The relatively low success ratio for wells drilled indicates that development may occur, but intense development and high production are not the most reasonably foreseeable scenario. The area would most likely be developed well by well rather than by drilling several wells concurrently to develop a field.

Conclusion

There would be no oil and gas production from the WSA. An estimated 73.1 BCF of gas and 1,424,763 BBLS of condensate would be foregone from 6 producing wells. This constitutes 0.15 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas). The potential value of oil and gas resources foregone is approximately \$95 million for gas and \$27 million dollars for oil.

ALKALI BASIN - EAST SAND DUNES WSA

Impacts to Wildlife Habitat

Due to the lack of development and human activity in the WSA, there would be no effect on big game animals.

Conclusion

There would be no effect on wildlife habitat or populations.

Impacts to Recreation Opportunities

Wilderness designation would prohibit the use of motorized vehicles (including over-snow vehicles) in the WSA. This would decrease hunter use and sightseeing, which are the major recreation uses. Recreation use in the WSA is estimated at fewer than 75 visitor-days annually. This would be reduced to 25 visitor-days annually. These users would be displaced to adjacent areas where vehicle access is less restricted.

Conclusion

Approximately 50 of the current 75 visitor-days annually would be displaced from the WSA.

Impacts to Livestock Grazing

Livestock management practices would not be affected. Current grazing use of 1,164 AUMs for cattle and 1,156 AUMs for sheep would continue from May 1 to December 15. Restrictions on the use of motorized vehicles would not be a problem because the primary use of the WSA is for trailing.

Conclusion

There would be no impact to livestock grazing. Current grazing use of 1,164 AUMs for cattle and 1,156 AUMs for sheep would continue from May 1 to December 15.

RED LAKE WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

This WSA is in east-central Sweetwater County about 50 miles northeast of Rock Springs (Map RL-1). The WSA is adjacent to the Alkali Basin-East Sand Dunes WSA, separated by a gravel road. The WSA consists of 9,515 acres of public land, including a portion of the Killpecker Sand Dunes in the Red Desert area of the Great Divide Basin (Map RL-2).

Proposed Action and Alternatives

Two alternatives were analyzed: 1) none of the 9,515-acre Red Lake WSA would be wilderness (Proposed Action - No Wilderness - No Action); and 2) all of the 9,515-acre WSA would be wilderness (All Wilderness).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

Proposed Action (No Wilderness - No Action)

The Proposed Action is that none of the 9,515-acre Red Lake WSA would be designated wilderness. The entire area would be open to oil and gas leasing. Motorized vehicles would be limited to 2 miles of existing trails and an additional 3 to 5 miles of road constructed to reach oil and gas well sites.

Mineral Resources

Oil and Gas Exploration and Development

Oil and gas leasing in the WSA would resume. It is estimated that there would be 9 wells drilled, resulting in 63 acres of surface disturbance and 3 to 5 miles of new roads. Seasonal stipulations would be added to new oil and gas leases in the eastern part of the WSA (approximately 2,000 acres) to protect crucial deer winter range. Five of the wells would be

dry holes and 4 would be producing wells. It is expected that the producing wells would occupy 4 acres for the long term, including associated roads and facilities. After the dry holes and the area not needed for production on the producing wells is reclaimed, 16 acres would be occupied by oil and gas facilities.

Solid Mineral Exploration and Development

Mineral extraction for salables (e.g., sand) would be allowed subject to surface protection and rehabilitation requirements to protect other resources. However, no such activity is anticipated. No other mineral resources are known to exist in the WSA. Therefore, no activity is expected.

Off-Highway Vehicle Use (OHV)

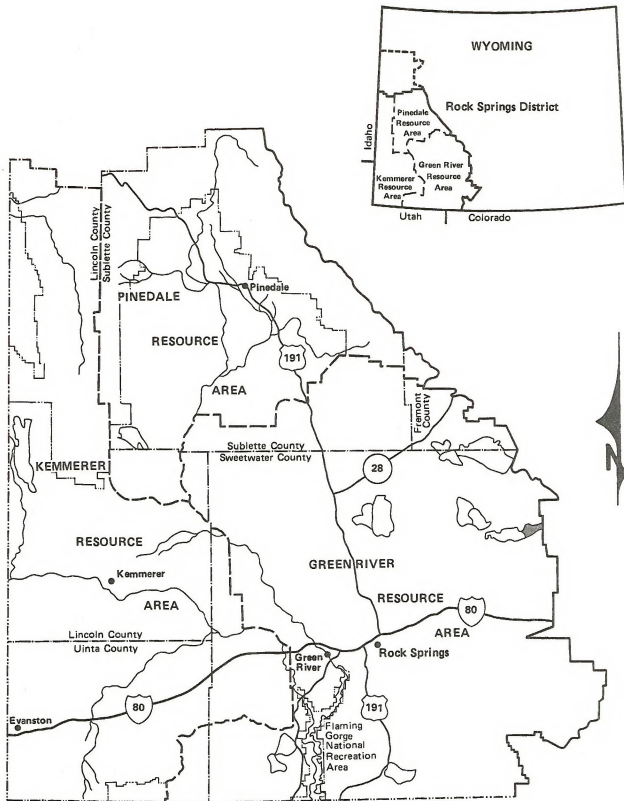
Motorized vehicles would be limited to 2 miles of existing trails and 3 to 5 miles of new roads associated with oil and gas development. Recreation use would involve approximately 150 visitor-days annually of motorized vehicle use. Range management activities would involve 1 or 2 days annually of motorized vehicle use.

Recreation Use

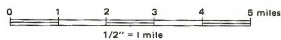
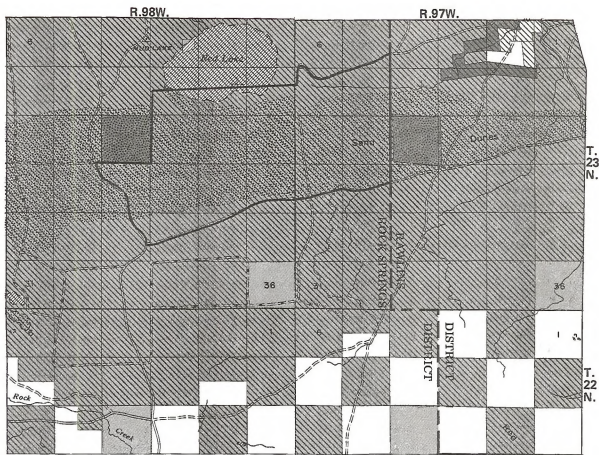
Hunting would be allowed but hunters using motorized vehicles would be limited to 2 miles of existing trails and 3 to 5 miles of new roads. No developments associated with recreation are anticipated. The existing recreation uses in the WSA would remain the same; 75 hunter-days and 125 visitor-days for rockhounding, dunes exploration, and outdoor education classes.

Grazing Use

Grazing management practices (Red Desert grazing allotment) would not change from those currently in place. Within the Red Lake WSA, the estimated carrying capacity is 756 AUMs for cattle and 739 AUMs for sheep, with use occurring from May 1 to December 15. One permittee uses the allotment for trailing sheep during the spring and fall. There are no range improvements in the WSA and none are planned. The use of motorized vehicles in connection with range management activities would be allowed. This use would generally be by horse or with a pickup truck or similar vehicle to check on livestock (1 trip annually). This use would generally occur on the 2 miles of existing trails and the 3 to 5 miles of new roads.



Map RL-1
 RED LAKE WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



Map RL-2
 LAND AND MINERAL STATUS
 Red Lake WSA

RED LAKE WSA

Wildlife Habitat Management

No actions associated with wildlife management are anticipated in the WSA. New oil and gas leases on the eastern part of the WSA (approximately 2,000 acres) would include stipulations to protect crucial deer winter range. Oil and gas operators would be required to reclaim areas no longer needed for oil and gas exploration and production. However, no actions would be taken to compensate for habitat lost as a result of oil and gas activities.

All Wilderness (9,515 acres designated)

All of the 9,515-acre of the Red Lake WSA would be designated as wilderness. There would be no oil and gas leases issued in the WSA. Therefore, there would be no surface disturbance associated with oil and gas exploration or development. No new roads would be built. Motorized vehicles would be prohibited except for limited, infrequent use in connection with grazing management activities (1 or 2 days annually).

Mineral Resources

Oil and Gas Exploration and Development

The 9,515 acres of Federal mineral estate in the WSA would not be leased for oil and gas. There are no pre-FLPMA oil and gas leases in the Red Lake WSA. Therefore, no oil and gas exploration or development would occur.

Solid Mineral Exploration and Development

Mineral extraction for salables would not be allowed. No other mineral resources are known to exist. Therefore, no activity is expected.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be prohibited in the WSA, except for limited, infrequent use in connection with grazing management activities. This would generally be 1 trip annually to check on livestock.

Recreation Use

Hunting would be allowed except that hunters would not be allowed to use motorized vehicles in

the WSA. No developments associated with recreation are anticipated in the WSA. Hunting would be reduced by about 10 percent, to 65 to 70 hunter-days annually. Other recreation uses of the WSA would also be reduced by about 10 percent because of the prohibition against motorized vehicles. There would be approximately 110 visitor-days annually for rock-hounding, dunes exploration, outdoor education classes, and camping.

Grazing Use

Grazing management practices (Red Desert grazing allotment) would not change from those currently in place. Within the Red Lake WSA, the estimated carrying capacity is 756 AUMs for cattle and 739 AUMs for sheep, with use occurring from May 1 to December 15. One permittee uses the allotment for tralling sheep during the spring and fall. There are no range improvements in the WSA and none are planned. Where practical alternatives are not available, the occasional use of motorized equipment could be permitted on a case-by-case basis following an environmental analysis. This use would generally be no more than 1 trip annually by horse, or with a pickup truck or similar vehicle to check on livestock.

Wildlife Habitat Management

No actions associated with wildlife management are anticipated in the WSA. Wildlife habitat would be maintained.

CHAPTER II - Affected Environment

Introduction

The dominant use of the Red Lake WSA is livestock grazing, with some hunting and primitive recreation use. The topography is predominantly low rolling sand dunes. Much of the WSA is covered by the low active dunes and is devoid of vegetation. Stabilized dunes are vegetated with big sagebrush, salt-bush, and a variety of grasses and forbs. Wildlife in the WSA include pronghorn antelope, small mammals, coyotes, and bobcats. The WSA is not part of a wild horse management area. However, wild horses frequently enter the WSA during spring and summer.

RED LAKE WSA

Wilderness Values

The 9,515-acre Red Lake WSA (entirely public land) meets the criteria established in Section 2(c) of the Wilderness Act of 1964.

Naturalness

The Red Lake WSA is presently in a natural condition. Intrusions in the WSA include a minor 2-track trail, originating off the western boundary road; a well and accompanying water trough, just inside the northern boundary road; and a few random tracks from off-road vehicles. There are approximately 2 miles of trails in the WSA.

Solitude

The opportunities for solitude in the Red Lake WSA are not outstanding. The size of the WSA, combined with the unbroken topography, provide the visitor with little natural screening from other visitors and/or outside influences.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation exist in the WSA. Raptors, wild horses, pronghorn antelope, coyotes, and a variety of small mammals also challenge the photographer. Hiking, backpacking, camping, horseback riding, hunting, and sightseeing are other experiences available to the visitor.

Special Features

The Killpecker Sand Dunes, the largest active sand dune region in North America, traverse the WSA from west to east. The WSA includes an unspoiled remnant of the Red Desert area of the Great Divide Basin and was recommended in BLM's Sandy-Pilot Butte MFP (1975) for primitive area designation. This region may be of scientific value for the study of active sand dunes, their movements, and how they are stabilized. Wild horses frequently enter the WSA.

Mineral Resources

The primary mineral value in the WSA is hydrocarbons. The oil and gas potential of the WSA is relatively low. The success ratio for wells drilled in the WSA is estimated at 15 percent. Wells drilled east of the WSA usually have some production. An exploratory well north of the WSA in the Mud Lake KGS produced some natural gas and petroleum condensates at 10,359 feet, but was abandoned by Ohio Oil Company in 1960. Wells drilled adjacent to the WSA on the west and south were dry holes. There are no records of exploration in the WSA itself, where active sand dunes make oil and gas development very difficult. There are no pre-FLPMA oil and gas leases in the WSA. Ten productive wells near the WSA were evaluated to determine recoverable reserves attributable to each well. Average recoverable reserves per 640 acres was estimated as 3.7 billion cubic feet (BCF) of natural gas (55.5 BCF total) and 71,238 barrels (BBLS) of condensate (1,059,109 BBLS total).

The Red Lake WSA is in an area known to contain coal-bearing strata. No other mineral resources are known to exist in the WSA.

Wildlife

The Red Lake WSA provides fair habitat for wildlife. The WSA contains yearlong pronghorn antelope habitat. The Sands elk herd occasionally inhabits the WSA during the winter months. There is some crucial winter range for deer on the far eastern edge of the WSA. Coyotes are common throughout the WSA, and bobcats occur as occasional residents.

The Red Lake WSA (9,515 acres) constitutes 0.9 percent of the 1,059,288-acre Table Rock mule deer hunt area; 0.9 percent of the 1,070,560-acre Table Rock pronghorn antelope hunt area; and 0.48 percent of the 1,999,076-acre Steamboat elk hunt area.

There has been no survey for prairie dog towns in the WSA. There is potentially suitable habitat in the north half of sections 7 and 8. There is no potentially suitable habitat for bald eagles, peregrine falcon, whooping crane, Colorado squawfish, or humpback chub.

Recreation Opportunities

Estimates of use for the hunt areas in which the Red Lake WSA (9,515 acres) is located include 88

RED LAKE WSA

hunter-days in the 1,059,288-acre Table Rock mule deer hunt area; and 1,057 hunter-days in the 1,070,560-acre Dry Lake pronghorn antelope hunt area.

Recreation use in the WSA for all types of recreation, including hunting, is fewer than 200 visitor-days annually. There would be about 75 hunter-days spent in the WSA and 125 visitor-days including rock-hounding, dunes exploration, outdoor education classes, and camping. Camping accounts for only about 10 visitor-days annually.

Livestock Grazing

The Red Lake WSA is used primarily for trailing sheep in the spring and fall. There are no range improvements in the WSA and none are planned. Since the WSA is used primarily for trailing, it is not anticipated that range improvements would be needed in the WSA.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of the environmental consequences of the No Wilderness (Proposed Action) and All Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-8 summarizes the impacts by alternative.

TABLE 2-8
SUMMARY OF IMPACTS RED LAKE WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Public Lands Designated	0 acres	9,515 acres
Other Lands	None	None
Area of Critical Environmental Concern (ACEC)	None	None
Wilderness Values		
Naturalness	Naturalness lost on 63 acres due to oil and gas activity.	Naturalness protected in the entire WSA.
Solitude	Solitude lost due to increased oil and gas activity and motorized vehicle use on access roads.	Solitude protected in the entire WSA.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation lost in the entire WSA.	Opportunities for primitive and unconfined recreation protected in the entire WSA.
Special Features	Special features protected in the entire WSA.	Special features protected in the entire WSA.
Minerals		
Oil and Gas	54.4 BCF natural gas (\$72 million) and 1,059,109 BBLs condensate (\$20 million) produced.	54.4 BCF natural gas (\$72 million) and 1,059,109 BBLs condensate (\$20 million) foregone. Success ratio: below 15 percent.

RED LAKE WSA

TABLE 2-8 (Continued)
SUMMARY OF IMPACTS RED LAKE WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Wells in WSA Not Designated	9	0
Surface Disturbance in WSA Not Designated	63 acres	0 acres
Solid Minerals	No potential	No potential
Wildlife Habitat and Populations	Some short-term displacement of big game. Pronghorn are main big game species and would only be slightly affected. No change in the hunt area's big game numbers.	No effect on wildlife.
Recreation Opportunities	No effect on recreation opportunities in the WSA.	No effect on recreation opportunities in the WSA.
Livestock Grazing	No effect on grazing use.	No effect on grazing management practices or numbers. Occasional inconvenience to livestock operator due to restriction on motorized vehicle use.

Proposed Action and Alternatives

Proposed Action (No Wilderness - No Action)

The Proposed Action is to designate none of the 9,515-acre Red Lake WSA as wilderness. There would be a potential for 9 oil and gas wells to be drilled, resulting in 63 acres of surface disturbance. There would be 5 dry holes and 4 producing wells. After the dry holes and areas not needed for production on the producing wells are reclaimed, there would be 16 acres occupied by oil and gas facilities. Motorized vehicles would be limited to 2 miles of existing trails and 3 to 5 miles of new roads constructed to reach oil and gas well sites.

Impacts to Wilderness Values

Naturalness

The WSA is relatively small size, relatively open, lacks of topographic relief, and contains vegetation that is generally common in character. These factors

would cause the naturalness of the WSA to be impaired as a result of oil and gas exploration activities. There would be a loss in naturalness on the 63 acres disturbed because of oil and gas activity. The 4 producing wells would continue to impair naturalness on 16 acres for the life of the wells.

Naturalness would be preserved in the rest of the WSA (9,410 acres). The use of motorized vehicles in connection with range management activities would be infrequent and would not affect naturalness. The additional 3 to 5 miles of roads would make access for range management easier. Travel off these roads would not be likely.

Solitude

The WSA is relatively small size, relatively open, lacks of topographic relief, and contains vegetation that is generally common in character. These factors would cause the noise from oil and gas exploration and development and motorized vehicles to adversely impact solitude throughout the WSA.

The use of motorized vehicles in connection with range management activities would be infrequent and would not affect solitude except for the short period of time when the activities are taking place (probably no more than a day or two). These activities would probably not be necessary every year.

RED LAKE WSA

Primitive and Unconfined Recreation

Primitive or wilderness type recreation values and opportunities for solitude would be adversely impacted or lost due to oil and gas development. The opportunity for this type of recreation would be lost in the entire WSA because the lack of topographic relief would make oil and gas activities visible throughout the WSA, reducing or eliminating the quality of the recreation experience for this type of recreation user.

Special Features

The active dunes in the WSA would not be affected. Small acreages in the partially stabilized dunes may be disturbed and partially destabilized. However, dune dynamics in the area would not be materially affected.

Conclusion

Wilderness values would not be afforded statutory protection. Solitude, naturalness, and opportunities for primitive and unconfined recreation would be lost throughout the WSA due to the impacts of oil and gas exploration and development and motorized vehicles.

Impacts to Oil and Gas Exploration and Production

A projected 55.5 BCF of natural gas (\$72 million) and 1,059,109 BBLS of condensate (\$20 million) would be recovered from 4 producing wells. Because the success ratio for wells drilled in the vicinity of the WSA is relatively low, the area would most likely be developed over the long term rather than in the immediate future. There is also not likely to be a period of concentrated activity associated with oil and gas development. Development is not expected to affect either the local or regional economy because of the long period over which the resource would be recovered and because of the relatively small number of wells that would be needed to develop the resource.

Conclusion

Approximately 55.5 BCF of natural gas (\$72 million) and 1,059,109 BBLS of condensate (\$20 million) would be recovered from 4 producing wells. This constitutes about 0.11 percent of the reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat

Big game would be displaced from their natural use areas due to surface disturbance (63 acres) from the development of 9 oil and gas wells and 3 to 5 miles of new roads. These impacts would generally be short term. The displacement would not be important to pronghorn antelope, which use the area year-long and which would not be displaced. Mule deer use the area to a lesser degree. Oil and gas leases on approximately 2,000 acres in the eastern part of the WSA would be conditioned to restrict activity in crucial mule deer winter range. This would help mitigate adverse impacts to mule deer. They would be displaced into other parts of the much larger herd area. Recreation activities are not expected to change. The 16 acres of habitat occupied by producing wells and associated facilities would affect only a small portion of the herd area for both antelope and mule deer. The entire WSA constitutes only about 1 percent of the herd area for both species. The continuation of current types and low levels of use would not affect big game habitat or populations.

Conclusion

There would be no effect on wildlife habitat from disturbance for oil and gas wells on 63 acres, and 16 acres occupied for the productive life of 4 producing wells. Antelope would be displaced during drilling of 9 wells but would return during production from the 4 producing wells.

Impacts to Recreation Opportunities

Recreation resources and uses within the WSA would not be significantly impacted as a result of the Proposed Action. Motor vehicle use would be limited to 2 miles of existing roads and trails and 3 to 5 miles of new roads. At present, there is very little use off these existing trails. The primary identified recreation uses, hunting and sightseeing, would not be significantly affected. Use levels are expected to remain about the same: 75 hunter-days and 125 visitor-days for rockhounding, dunes exploration, and outdoor education classes. Camping would not occur, primarily because of the additional disturbance and activity from oil and gas activities. For most activities, the additional access created by an additional 3 to 5 miles of roads would offset the effects of additional disturbance. The quality of the recreation experience would be reduced for about 25 percent of the visitor use in the WSA due to the impacts of oil and gas development (increased surface disturbance, human presence, and noise).

RED LAKE WSA

Conclusion

The quality of the recreation experience would be reduced for about 25 percent of the visitor use in the WSA. Up to 10 visitor-days annually of camping would not occur. Hunting use would remain at 75 hunter-days annually. There would be 125 visitor-days annually for rockhounding, dunes exploration, and outdoor education classes.

Impacts to Livestock Grazing

Livestock use would continue at 756 AUMs for cattle and 739 AUMs for sheep (May 1 to December 15). Livestock management practices would not be affected. No range improvements would be implemented. New roads associated with oil and gas activities would improve access to the WSA, facilitating livestock management.

Conclusion

There would be no impacts to livestock grazing. Livestock use would continue at 756 AUMs for cattle and 739 AUMs for sheep (May 1 to December 15).

Unavoidable Adverse Impacts

Approximately 63 acres would be disturbed due to drilling of 9 oil and gas wells. Approximately 16 acres would be occupied by oil and gas facilities for the productive life of the 4 producing wells.

Irreversible and Irrecoverable Commitments of Resources

Approximately 55.5 BCF of natural gas and 1,059,109 BBLs of condensate would be recovered from 4 producing wells.

Short-Term Uses versus Long-Term Productivity

Approximately 20 acres would be occupied by 4 producing oil and gas wells and associated access roads and facilities for the producing life of the wells. The long-term productivity of these acres would be lost for 30 to 50 years, until reclamation re-established existing vegetation cover. However, this loss is small and would not affect the ability of the WSA to support current numbers of wildlife and domestic livestock.

All Wilderness (9,515 acres designated)

All of the 9,515-acre Red Lake WSA would be designated as wilderness. There would be no oil and gas leases issued. Therefore, no surface-disturbing activities associated with oil and gas development are expected. Motorized vehicles would be prohibited in the WSA, except for a limited amount of use associated with range management activities.

Impacts to Wilderness Values

Naturalness

The natural character of the WSA would be retained because no oil and gas activities would occur and motorized vehicles would be prohibited. The occasional motorized vehicle use in connection with range management activities on 2 miles of existing trails would not result in the existing trails becoming more visible.

Solitude

Solitude would not be adversely affected in the WSA because oil and gas activities would not occur and motorized vehicles would be prohibited, except for 1 or 2 days annually in connection with livestock grazing.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation in the WSA would not be affected.

Special Features

The dunes in the Red Lake WSA would not be affected because oil and gas exploration and development and motorized vehicles would not be allowed in the designated wilderness area.

Conclusion

Wilderness values would be protected in the entire 9,515-acre WSA.

Impacts to Oil and Gas Exploration and Production

No oil and gas resources would be recovered from the WSA. This would result in the loss of an esti-

RED LAKE WSA

mated 55.5 BCF of natural gas (total) and 1,059,109 BBLS of condensate (total) from 4 producing oil and gas wells. Because of the small size of the WSA, the lack of development within the WSA is not expected to affect either the local or the regional economy. The total value of the potential recoverable reserves in the Red Lake WSA is approximately \$72 million for gas and \$20 million for oil. These economic benefits would not be achieved.

Conclusion

A projected 55.5 BCF of natural gas (\$72 million) and 1,059,109 BBLS of condensate (\$20 million) would be foregone from 4 producing oil and gas wells. This constitutes only about 0.11 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat

There would be no surface-disturbing activities due to oil and gas exploration and production if the WSA were designated wilderness and no change in recreation use. Motorized vehicles would be prohibited in the WSA. Therefore, motorized vehicles would not displace big game from the WSA.

Conclusion

There would be no effect on wildlife habitat or populations because there would be no changes in surface disturbance or human activity.

Impacts to Recreation Opportunities

Wilderness designation would eliminate the use of vehicles within the WSA. This would result in a small

decrease in hunter use (65 to 70 hunter-days annually), sightseeing, and other nonmotorized recreation activities which are presently the major recreation uses in the WSA. While these recreation activities (110 visitor-days annually) are the main uses of the WSA, total visitor use would be fewer than 200 visitor-days annually. The designation of the area as wilderness is not expected to increase the public's interest in or use of the area.

Conclusion

The WSA would lose approximately 10 percent of its current use. There would be 60 to 70 hunter-days annually and 110 visitor-days for other nonmotorized recreation (rockhounding, dunes exploration, outdoor education classes, and camping).

Impacts to Livestock Grazing

Livestock use would continue at 756 AUMs for cattle and 739 AUMs for sheep. (May 1 to December 15). There would be no effect on livestock management practices or livestock numbers. The restrictions on motorized vehicles may create an occasional inconvenience to livestock operators. Currently, livestock operators use motorized vehicles to check on livestock because there are no range improvements in the WSA. No new range improvements would be implemented.

Conclusion

There would be no impact to livestock grazing. Livestock use would continue at 756 AUMs for cattle and 739 AUMs for sheep. (May 1 to December 15).

HONEYCOMB BUTTES WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Honeycomb Buttes WSA is in southeastern Fremont County and north-central Sweetwater County, approximately 30 miles northeast of Farson (Map HB-1). The WSA is approximately 13 miles wide by 8 miles long at its widest point and contains 41,188 acres of public land (of which 640 acres is split estate) and 640 acres of State land and minerals (Map HB-2).

Since the Final Inventory Report (USDI 1981a), 216 acres were removed from 3 locations around the boundary of the WSA (section 16, T. 27 N., R. 99 W.; section 16, T. 26 N., R. 98 W.; and section 36, T. 26 N., R. 99 W.) because of manageability problems. The acreage analyzed as inside the WSA in the Revised Draft EIS and in this Final EIS is 41,188 acres.

Proposed Action and Alternatives

Three alternatives were analyzed: 1) 37,287 acres of the 41,188-acre Honeycomb Buttes WSA would be wilderness (Proposed Action); 2) all of the 41,188-acre Honeycomb Buttes WSA would be wilderness (All Wilderness); and 3) none of the Honeycomb Buttes WSA would be wilderness (No Wilderness).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe actions that would occur under each alternative.

Proposed Action (37,287 acres designated)

The Proposed Action is to designate 37,287 acres of public land (including 640 acres of split estate) in the Honeycomb Buttes WSA. The 3,261 acres not designated would be managed under multiple-use management. There are 640 acres of State land and minerals in the area designated. These lands would be added to the wilderness area, if they are acquired.

The additional lands would improve manageability of the wilderness area.

Before authorizing any surface-disturbing activities, a field check would be performed for the presence of large-seeded bladderpod (*Lesquerella macrocarpa*), a sensitive plant species. Activities would be conditioned so as not to adversely affect any such populations.

Mineral Resources

Oil and Gas Exploration and Development

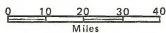
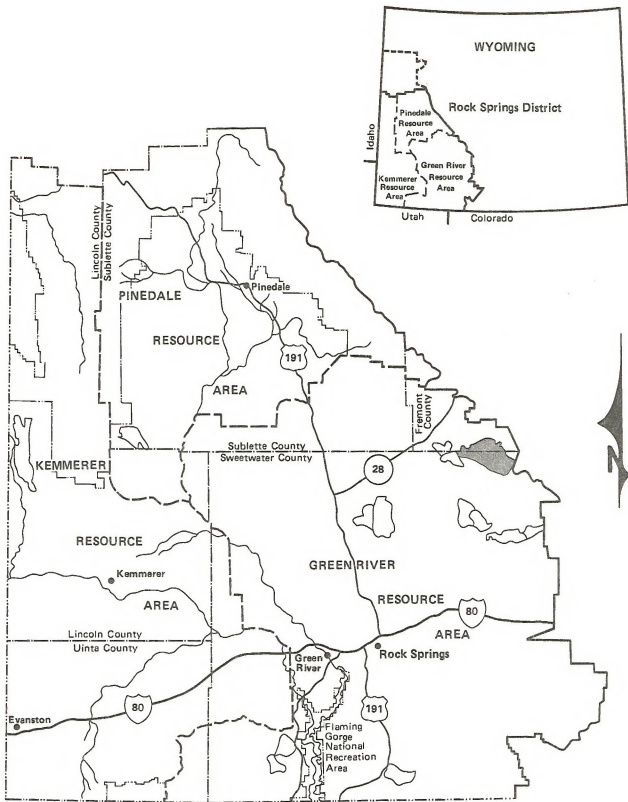
There are no pre-FLPMA leases in the Honeycomb Buttes WSA. Unleased Federal minerals in the area designated (36,647 acres) would not be offered for lease.

Unleased Federal minerals in the area not designated (3,261 acres) would be offered for lease. Because of the low success rate of wells drilled in surrounding areas, no more than 3 exploratory wells would be drilled in the area not designated before exploration is stopped. Therefore, it is assumed that production would be encountered by the third exploratory well, and that 2 additional wells would be drilled in the 3,261-acre area to recover the estimated 21.5 BCF of natural gas. Oil and gas leases would be conditioned to protect raptor habitat and the large seeded bladderpod, and to restrict surface disturbance within 500 feet of Sand Creek. There would be a potential for 5 wells to be drilled, resulting in 35 acres of surface disturbance. Approximately 3 miles of new road would be constructed to reach oil and gas well sites. When 3 producing wells go into production, there would be 12 acres of surface disturbance from oil and gas activities.

Solid Mineral Exploration and Development

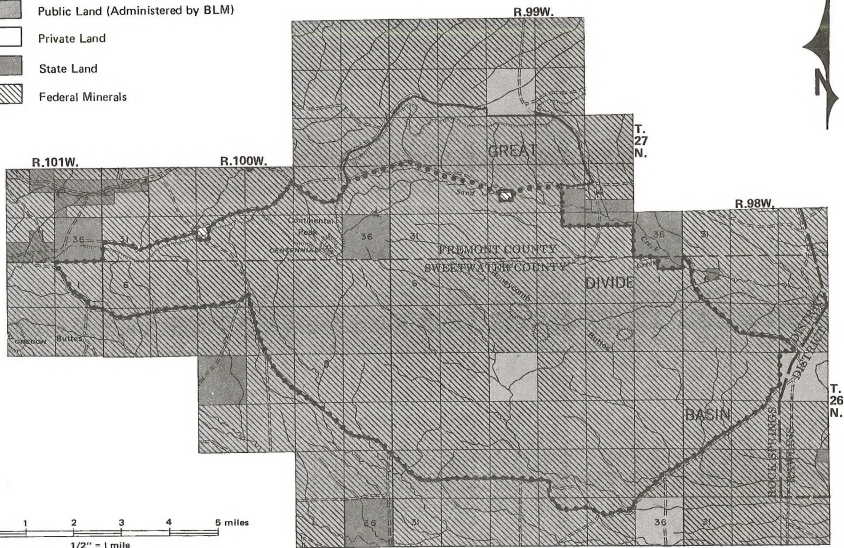
No activity related to salable or leasable minerals would be allowed in the area designated.

The area designated would not be open to mineral location. There are 14 current mining claims in the area designated. These claims are within a mile of the northern boundary of the area designated. Assessment work on these claims would continue, disturbing a total of up to 2 acres annually in small widely spaced areas. The filing of new mining claims would not be allowed after wilderness designation. Assessment work on new claims filed before wilderness designation would be restricted to operations that BLM determines satisfy the nonimpairment criteria (BLM Manual H-8550-1). However, no production from claims in the WSA is anticipated.



Map HB-1
HONEYCOMB BUTTES WSA
 Rock Springs District
 Wilderness Environmental Impact Statement

- Wilderness Study Area Boundary
- Proposed Wilderness Boundary
Proposed Action
- Public Land (Administered by BLM)
- Private Land
- State Land
- Federal Minerals



Map HB-2
LAND AND MINERAL STATUS
 Honeycomb Buttes WSA

HONEYCOMB BUTTES WSA

Activity related to salable and leasable minerals would be allowed in the area not designated. However, no activity related to salable or leasable minerals is anticipated. Although coal, oil shale, and uranium may be present, their development potential is low.

The area not designated wilderness would be open to mineral location. Assessment work on current mining claims would continue, disturbing less than 1 acre annually. No production of locatable minerals from the WSA is anticipated.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be prohibited in the area designated, except for emergency purposes and limited use in connection with grazing management practices. There are currently 3.5 miles of existing trails in the area designated. Where practical alternatives are not available, the occasional use of motorized equipment could be permitted on a case-by-case basis following an environmental analysis. Livestock operators would make 2 to 4 trips annually into the WSA. One range improvement would be maintained every 1 to 3 years. There would be approximately 30 visitor-days for hunting spent in the area designated annually and 90 visitor-days for nonhunting recreation such as rockhounding, spelunking, and sightseeing.

Motorized vehicles would be limited to existing roads and trails in the area not designated wilderness. Approximately 4.5 miles of existing road separates the area designated from the area not designated. Motorized vehicles could utilize this existing road. The same 2 to 4 trips annually by livestock operators would cover grazing management in this area. There would be 20 visitor-days for hunting and 10 visitor-days for nonhunting recreation spent in the area not designated.

Recreation Use

No projects associated with recreation are planned in the WSA. Rockhounding and hunting would continue to occur throughout the WSA.

Hunting would be allowed but motorized vehicles would be prohibited in the area designated wilderness. There would continue to be approximately 30 hunter-days spent annually in the area designated, mostly for antelope and sage grouse. Hunters would use boundary roads as points of departure into the area designated. There would continue to be approximately 90 visitor-days annually of nonhunting recreation.

Hunting using motorized vehicles in the area not designated wilderness (20 visitor-days annually)

would be allowed. Motorized vehicles would be limited to 3.5 miles of existing trails and 3 miles of new roads. There would continue to be approximately 10 visitor-days annually of nonhunting recreation.

Grazing Use

The grazing management practices (Red Desert and Continental Peak grazing allotments) would not change from those currently in place. In the Honeycomb Buttes WSA, the estimated carrying capacity of 1,919 AUMs for cattle and 2,988 AUMs for sheep would continue from May 1 to November 30. The Red Desert allotment is used mostly for trailing sheep, and the Continental Peak allotment is used mostly for cattle grazing.

There are 18 range improvements in the area designated. Half are washed out reservoirs or nonfunctional improvements. One reservoir along Red Creek would be reconstructed to meet nonimpairment standards. Other functional improvements would be maintained approximately once every 5 years. The remaining reservoirs would not be reconstructed and would continue to be nonfunctional. Three spring developments would be needed, within 1 mile of the boundary of the WSA, to maintain livestock distribution and numbers in the northwestern part of the area recommended. These would be built to meet nonimpairment standards and would disturb less than 1 acre each. Every 1 to 3 years, one range improvement would be maintained.

Where practical alternatives are not available, the occasional use of motorized equipment could be permitted on a case-by-case basis following an environmental analysis (2 to 4 days annually).

In the area not designated, livestock grazing management would be the same as that described for the area designated except that motorized vehicle use for maintenance, management, and construction activities would be allowed and would utilize existing roads and trails. The same 2 to 4 trips annually made into the area designated would be used for grazing management in the area not designated.

Wildlife Habitat Management

No projects associated with wildlife management are anticipated in the area designated.

In the area not designated, oil and gas operators would be required to reclaim disturbed areas no longer needed for oil and gas exploration and production. There would be pothole development in a wet bog for wildlife and livestock use (2 to 4 acres). However, no actions would be undertaken to compensate for habitat lost as a result of oil and gas activities.

HONEYCOMB BUTTES WSA

All Wilderness (41,188 acres designated)

All of the 41,188-acre Honeycomb Buttes WSA would be designated as wilderness. Oil and gas leasing would not resume. No oil and gas activity would take place. The WSA includes 640 acres of split estate (Federal surface, State minerals) and 640 acres of State land and minerals. These lands would be added to the wilderness area, if they are acquired.

Mineral Resources

Oil and Gas Exploration and Development

There are no pre-FLPMA leases in the Honeycomb Buttes WSA. No oil and gas leases would be issued in the WSA. Therefore, there would be no surface disturbance associated with oil and gas activities.

Solid Mineral Exploration and Development

Activity related to salable and leasable minerals not would be allowed in the WSA.

The WSA would not be open to mineral location. Assessment work would continue on 14 current mining claims. The filing of new mining claims would not be allowed after wilderness designation. Assessment work on new claims filed before wilderness designation would be required to meet the nonimpairment criteria (BLM Manual H-8550-1). Assessment work on these claims would continue, disturbing a total of up to 2 acres annually in small widely spaced areas. No production of locatable minerals from the WSA is anticipated.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be prohibited in the entire WSA, except for limited use in connection with range management activities. Where practical alternatives are not available, the occasional use of motorized equipment by livestock operators could be permitted on a case-by-case basis following an environmental analysis. The current level of 2 to 4 trips annually into the WSA for livestock management purposes would continue. Every 1 to 3 years, one range improvement would be maintained. Eight miles of existing trails would be closed.

Recreation Use

Hunting would be allowed but hunters would not be allowed to use motorized vehicles. Hunters would use boundary roads and the cherrystemmed road. There would continue to be approximately 40 hunter-days spent annually in the WSA, mostly for antelope and sage grouse. The current level of 100 visitor-days for nonhunting recreation (including rock-hounding and spelunking) would continue, using boundary roads and the cherrystemmed road as departure points into the WSA.

Grazing Use

The grazing management practices (Red Desert and Continental Peak grazing allotments) would not change from those currently in place. Within the Honeycomb Buttes WSA, the estimated carrying capacity of 1,919 AUMs for cattle and 2,988 AUMs for sheep would continue from May 1 to November 30.

There are 16 range improvements in the WSA. Half are washed out reservoirs or nonfunctional improvements. One reservoir along Red Creek would be reconstructed to meet nonimpairment standards. Other functional improvements would be maintained. Three spring developments (less than 1 acre each) would be needed, within 1 mile of the boundary of the WSA, to maintain livestock distribution and numbers in the western part of the WSA. Spring developments would be completed in conformance with the nonimpairment criteria. Every 1 to 3 years, one range improvement would be maintained. Where practical alternatives are not available, the occasional use of motorized vehicles may be permitted on a case-by-case basis following an environmental analysis.

Wildlife Habitat Management

No projects associated with wildlife management are anticipated in the WSA.

No Wilderness (No Action)

None of the 41,188-acre Honeycomb Buttes WSA would be designated as wilderness. The entire WSA would be open to oil and gas leasing.

Before any surface-disturbing activities are authorized, a field check would be performed for the pres-

HONEYCOMB BUTTES WSA

ence of large-seeded bladderpod (*Lesquerella macrocarpa*), a sensitive plant. Oil and gas leases would be conditioned to avoid adverse effects on populations of this species.

Mineral Resources

Oil and Gas Exploration and Development

Unleased federal oil and gas (40,764 acres) would be offered for lease. Leases would be conditioned with stipulations to protect raptors, big game winter range (elk and deer), sage grouse, and sensitive plants. There would be restrictions on surface disturbance within 500 feet of live water to protect 2 natural springs near the center of the WSA.

There would be a potential for 31 wells to be drilled in the WSA, resulting in 217 acres of surface disturbance. Of these 31 wells, 21 would be producers and 10 would be dry holes. When wells go into production, 105 acres would be occupied by oil and gas related facilities. Approximately 20 to 25 miles of new roads would be constructed to reach oil and gas well sites.

Solid Mineral Exploration and Development

Activity related to salable and leasable minerals would be allowed. However, no activity related to salable or leasable minerals is anticipated. Although coal, oil shale, uranium, and gold may be present, their development potential is low.

The entire WSA would be open to mineral location. Assessment work on 14 current mining claims would continue. Assessment work on new claims filed prior to release to multiple-use management would be required to meet the nonimpairment criteria (BLM Manual H-8550-1). Assessment work on these claims would continue, disturbing a total of up to 2 acres annually in small widely spaced areas. No production from claims in the WSA is anticipated.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be limited to 8 miles of existing roads and trails and an estimated 20 to 25 miles of new roads needed to reach oil and gas well sites. Livestock operators would make 2 to 4 trips annually into the area. Every 1 to 3 years, one range improvement would be maintained.

Recreation Use

Recreation management would not change. No recreation-related developments are planned. Motorized vehicles use would be limited to 8 miles of existing roads and trails and 20 to 25 miles of new roads.

There would be approximately 65 hunter-days spent annually in the WSA, mostly for antelope and sage grouse. Rockhounding would continue to occur. The current level of 100 visitor-days for non-hunting recreation would continue, using boundary roads and the cherrystemmed road as departure points into the WSA.

Grazing Use

The grazing use (Red Desert and Continental Peak grazing allotments) would continue at 1,919 AUMs for cattle and 2,988 AUMs for sheep from May 1 to November 30. There are 16 range improvements in the WSA. About half of these are functional. Most nonfunctional improvements would not be maintained. Most functional improvements would be maintained. Three spring developments would be needed near the western boundary of the WSA to maintain livestock distribution and numbers. Every 1 to 3 years, one range improvement would be maintained. Motorized vehicle use in connection with range management activities would be allowed. Livestock operators would make 2 to 4 trips annually into the area.

Wildlife Habitat Management

Two guzzlers to benefit sage grouse and antelope would be installed along the North Fork of Bear Creek and in the badlands along the west edge of the WSA. There would be pothole development in a wet bog in the northern part of the WSA, at the locations of 3 washed out reservoirs, for wildlife and livestock.

Oil and gas leases would be conditioned with stipulations to protect raptors, big game winter range (elk and deer), sage grouse, and the large-seeded bladderpod. There would be restrictions on surface disturbance within 500 feet of live water to protect 2 natural springs near the center of the WSA. Oil and gas operators would be required to reclaim disturbed areas which are not needed for production. However, no actions would be undertaken to compensate for habitat lost as a result of oil and gas activities.

HONEYCOMB BUTTES WSA

CHAPTER II - Affected Environment

Introduction

The dominant use of the Honeycomb Buttes is livestock grazing. Other major uses are big game hunting, fossil hunting, and rock hunting. The Honeycomb Buttes are one of the best examples of multi-colored badland topography in Wyoming. The WSA contains terrain types ranging from sagebrush hills and eroding flats surrounding the badlands, to eroded buttes with many bluffs, small draws, and side canyons. At its source, the quality of spring water on the western boundary of the WSA is adequate for human consumption; no impacts are anticipated to this water source. The springs create small (1- to 3-acre), well vegetated areas among the mudstone and clay buttes.

No threatened or endangered animal or plant species were identified in the WSA. The large-seeded bladderpod (*Lesquerella macrocarpa*), is a sensitive plant, found on bentonitic clays. It is a member of the mustard family with a biennial growth cycle. Mitigation measures required under any alternative would prevent adverse impacts to this species.

No ACECs are associated with the Honeycomb Buttes WSA. The northeast corner of the Oregon Buttes ACEC borders on the western edge of the WSA.

Wilderness Values

The 41,188-acre Honeycomb Buttes area meets the criteria in Section 2(c) of the Wilderness Act of 1964. The WSA contains 41,188 acres of public land (including 640 acres Federal surface and State minerals), 640 acres of State land and minerals, and 40 acres of private land. The partial wilderness area includes 37,287 acres of public land (including 640 acres of split estate) and 640 acres of State land.

Naturalness

The WSA contains minor intrusions in the form of 8 miles of 2-track trails, but it is essentially natural in character. There is an old dozer line associated with uranium from the mid-1970s. Much of the area is highly erodible, and surface impacts fade relatively quickly. There is little evidence of humans in most of the WSA.

Solitude

The many cliffs, ridges, draws, and secluded grottos provide numerous areas where solitude can be experienced. The superb coloration of the buttes enhances one's appreciation for the natural setting of the Honeycombs.

Primitive and Unconfined Recreation

The WSA provides opportunities for various kinds of primitive and unconfined recreation (100 visitor-days annually). These opportunities include: rockhounding, nontechnical climbing on the clay and rocky buttes, spelunking in erosion caves found in the buttes, and photography.

Special Features

Agates, jade, and petrified wood provide outstanding rockhounding values. Spelunking in the erosion caves found in the buttes is an unusual experience. Ancient Lake Gosiute left remains of turtles, gar, and other marine life in the Honeycombs. The WSA contains multi-colored eroding buttes which provide very interesting scenery for a casual observer from outside the WSA. Broad vistas add to this experience. The buttes provide a maze of interesting terrain through which to hike.

Mineral Resources

Hydrocarbons are the most valuable potential mineral resources of the Honeycomb Buttes WSA. Both source rocks and potential reservoir rocks are found within the WSA. The lack of success of a large number of wells in the area does not support a rating of high potential for oil and gas. Resource potential is judged as moderate (USGS 1987).

The most probable recoverable reserves estimated in the 40,764 acres of Federal mineral estate are 64.2 billion cubic feet (BCF) of natural gas. Maximum recoverable reserves were calculated from the "Wyoming Geological Association Guidebook, Greater Green River Basin Symposium" (WGA 1973). It was estimated there are 3.32 BCF of natural gas per 640 acres in the Green River Basin (15,046 square miles) or total recoverable reserves of about 50,000 BCF of gas in the Green River Basin.

Some oil shale occurs in the Wilkins Peak Member of the Green River Formation in the WSA, but the beds are thin and low-grade. The oil shale resource has little or no development potential (USGS 1987).

HONEYCOMB BUTTES WSA

About 33 percent of the WSA is within a USGS coal classification order and within a coal lands withdrawal by Executive Order (November 15, 1910). No coal beds outcrop within the WSA. The WSA has low potential for economic development of coal. There is a potential for the occurrence of a coal-bearing sequence at depths in excess of 2,300 to 5,000 feet.

Northwest and southwest of the WSA, uranium mineralization occurs in sandstone and conglomerate and in coal beds in the Wasatch Formation. Although uranium may be present, it would require extensive exploration to determine the extent and depth of mineralization (USGS 1987).

There are 14 placer gold claims in the northern part of the WSA. Based on current information, the placer gold deposits are considered subeconomic (USGS 1987).

Sediment deposits of Quaternary age sand and gravel outcrop in the Honeycomb Buttes WSA. There is no nearby demand for this resource and its development potential is considered low.

Wildlife

The primary big game species in the WSA is antelope. Several hundred occupy the WSA during the spring, summer, and fall. Mule deer use northern parts of the WSA yearlong, moving to northwestern parts during severe winter weather. Approximately 20 mule deer occupy the area near the 2 springs. Elk use northwestern parts of the WSA during the summer and migrate to the south-central parts in winter.

The Honeycomb Buttes WSA constitutes 2.1 percent of the 1,999,076-acre Steamboat elk hunt area; 4.0 percent of the 1,059,288-acre Table Rock mule deer hunt area; and 3.9 percent of the 1,070,560-acre Table Rock pronghorn antelope hunt area.

The WSA provides excellent habitat for sage grouse. Raptor habitat is excellent, due to the availability of suitable nesting sites. Although aerial observations were conducted in the WSA, intensive inventories are lacking. Golden eagles, prairie falcons, great horned owls, and ferruginous hawks have been observed.

Predators including mountain lions, swift foxes, and coyotes use the Honeycomb Buttes WSA. Mountain lion habitat is limited to the extreme west portion of the WSA. Bobcats and coyotes use the entire WSA

and are relatively common. A swift fox was sighted on the WSA's southeastern boundary in September 1975.

There has been no survey for prairie dog towns. The WSA was surveyed for raptors in 1983 and 1984. No bald eagle habitat was documented. There is no suitable habitat for peregrine falcon, whooping crane, Colorado squawfish, or humpback chub.

Recreation Opportunities

Estimates of use for the hunt areas which encompass the Honeycomb Buttes WSA include 229 hunter-days in the 1,999,076-acre Steamboat elk hunt area; 88 hunter-days in the 1,059,288-acre Table Rock mule deer hunt area; and 1,057 hunter-days in the 1,070,560-acre Table Rock pronghorn antelope hunt area.

There are approximately 40 hunter-days spent in the WSA annually, almost entirely for sage grouse and antelope. There is some deer hunting in the far western portion of the WSA.

Visibility from the butte tops and Continental Peak is outstanding, offering miles of scenic vistas from the Wind River Mountain Range to the north to the Uinta Mountain Range to the southwest. The area ranges from sagebrush hills and greasewood flats to the eroding buttes with many bluffs, small draws, and side canyons. The area contains bright and varied colors due to the green, red, gray, white, yellow, and other colored layers of the Cathedral Bluffs Tongue of the Wasatch Formation. There are approximately 100 visitor-days spent in the WSA annually for rockhounding, spelunking, hiking, and sightseeing.

Livestock Grazing

The Continental Peak allotment in the western part of the WSA is used mostly for cattle grazing (1,919 AUMs) from May 1 through November 30. The Red Desert allotment in the eastern part of the WSA is used mostly for trailing of sheep in the spring and fall (2,988 AUMs). There are 16 range improvements in the WSA, half of which are not functional. Maintenance has not been performed on these improvements for the past 6 years.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of the environmental consequences for the Proposed Action, All Wilderness, and No Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposal. Table 2-9 summarizes the impacts by alternative.

In the Revised Draft EIS (No Wilderness alternative), it was assumed that there would be 1 oil and gas well per section (640 acres) for a total of 66 wells in the WSA. This Final EIS more accurately reflects a reasonably foreseeable development scenario which includes both dry holes and producing wells. There would be a total of 31 oil and gas wells drilled in the WSA (21 producing wells and 10 dry holes).

Proposed Action and Alternatives

Proposed Action (37,287 acres designated)

The Proposed Action is to designate 37,503 acres of public land in the 41,188-acre Honeycomb Buttes WSA as wilderness. The remaining 3,261 acres of the WSA would not be designated. Five oil and gas wells would be drilled in the area not designated, resulting in approximately 35 acres of surface disturbance. Motorized vehicles would be prohibited in the area designated, and would be limited to 4.5 miles of existing trails and 3 miles of new roads in the area not designated.

Impacts to Wilderness Values

Naturalness

There would be no oil and gas activities in the 37,287-acre area designated. While assessment

activity on mining claims would continue in the area designated (disturbing up to 2 acres annually), development potential is low and it is anticipated that the claims would be abandoned within 5 to 10 years. The use of motorized vehicles in connection with range management activities would be occasional and would not result in existing trails becoming more visible in the area designated. Range improvements would be built and maintained to meet nonimpairment standards. For these reasons, naturalness would be preserved in the 37,287-acre area designated except for the 2 acres of disturbance associated with mining claims (10 to 20 acres total).

There would be a small increase in motorized vehicle use (approximately 10 percent) in the 3,261-acre area not designated because of the increased access created by approximately 3 miles of new oil and gas roads. No increase in vehicle use associated with range management activities is anticipated. This would adversely affect naturalness on 35 acres in the area not designated. Approximately 20 acres of surface disturbance from dry holes and disturbed areas not needed for production would be reclaimed. When construction and drilling activity stops and production begins, naturalness would begin to return. Because of the long time required to return an area to its natural condition, naturalness would be lost for the foreseeable future.

Solitude

Solitude would be protected in the 37,287-acre area designated, except for up to 14 days annually when assessment work on mining claims would take place and 4 to 8 days annually when livestock operators would use motorized vehicles. No oil and gas activity would take place.

There would be a small increase in motorized vehicle use (approximately 10 percent) in the area not designated because of the increased access created by approximately 3 miles of new roads associated with oil and gas development. No increase in vehicle use associated with range management activities is anticipated. This would adversely affect solitude in the area not designated.

When construction and drilling activity associated with oil and gas development takes place (probably several years away), solitude would be lost in the area not designated (3,261 acres). When construction and drilling stops and production begins, the adverse impacts to solitude would be reduced but it would be still be lost on at least a weekly basis in the area not designated because of the additional motorized vehicle traffic associated with production operations and the additional access created by oil and gas roads.

TABLE 2-9
SUMMARY OF IMPACTS HONEYCOMB BUTTES WSA

	Proposed Action (Partial Designation)	Alternative A (All Wilderness)	Alternative B (No Wilderness)
Public Lands Designated	37,287 acres (90%)	41,188 acres (100%)	0 acres (0%)
Other Lands	640 acres split estate (Federal surface, State mineral) included in area designated. 640 acres of State land would be added to wilderness area, if acquired. 40 acres of private land are outside boundary of area designated.	640 acres split estate (Federal surface, State mineral) included in area designated. 640 acres of State land would be added to wilderness area, if acquired. 40 acres private land with a cherrystemmed road.	640 acres split estate (Federal surface, State mineral) included in the WSA. 640 acres of State land in the WSA. 40 acres of private land in the WSA.
Area of Critical Environmental Concern (ACEC)	None	None	None
Wilderness Values			
Naturalness	Naturalness protected on 37,287 acres designated. Naturalness lost on 35 acres in 4,117-acre area not designated.	Naturalness protected in the entire WSA.	Naturalness lost on 217 acres in 41,404-acre WSA due to drilling of 21 oil and gas wells. Naturalness preserved in the remainder of the WSA.
Solitude	Solitude protected on 37,287 acres designated. Solitude lost in 3,261-acre area not designated due to drilling of 5 oil and gas wells and motorized vehicles on new access roads.	Solitude protected in the entire WSA.	Solitude lost in 41,188-acre WSA due to drilling of 21 oil and gas wells and motorized vehicles on new access roads.
Primitive and Unconfined Recreation	Opportunities for primitive unconfined recreation would remain at present levels.	Opportunities for primitive unconfined recreation would remain at present levels.	Opportunities for primitive unconfined recreation would remain at present levels.
Special Features	Special features protected in the entire WSA.	Special features protected in the entire WSA.	Special features protected in the entire WSA.
Minerals			
Oil and Gas	56.5 BCF natural gas (\$73 million) would be foregone in the area designated.	64.2 BCF natural gas (\$83 million) would be foregone from the WSA. No oil and gas would be recovered.	No portion of the WSA designated.

TABLE 2-9 (Continued)
SUMMARY OF IMPACTS HONEYCOMB BUTTES WSA

	Proposed Action (Partial Designation)	Alternative A (All Wilderness)	Alternative B (No Wilderness)
	7.7 BCF natural gas (\$10 million) would be recovered from the area not designated.	All of WSA is designated.	64.2 BCF natural gas (\$83 million) would be recovered. Reserves are deep and would not be recovered in the near future.
Wells In Area Not Designated	5	0	21
Surface Disturbance In Area Not Designated	35 acres		
Solid Minerals	In area designated, no salable or leasable mineral activity would be allowed. Locatable mineral activity could continue on 14 mining claims in area designated. In area not designated, salable and leasable mineral activity would be allowed but no activity is anticipated. Area would be open to new mining claims (locatable minerals).	No salable or leasable mineral activity would be allowed. Locatable mineral activity could continue on 14 mining claims. All of WSA is designated.	No part of the WSA is designated. Leasable and salable mineral activity would be allowed. However, no activity is anticipated. Locatable mineral activity could continue on existing mining claims. WSA would be open to new claims.
Wildlife Habitat and Populations	In the area designated, wildlife would not be affected. In the area not designated (4,117 acres), there would be disturbance to wildlife (habitat and avoidance) from up to 5 wells over the long term, which would be a minor impact. Big game numbers would not be affected.	Wildlife, including big game, would not be affected. All of WSA is designated.	No part of the WSA is designated. Surface disturbance would reduce wildlife habitat and would result in avoidance of the area by big game. Development of oil and gas resources would take at least ten years, reducing the level of activity in any one year and reducing effects on big game. Big game numbers would not be affected.

TABLE 2-9 (Continued)
SUMMARY OF IMPACTS HONEYCOMB BUTTES WSA

	Proposed Action (Partial Designation)	Alternative A (All Wilderness)	Alternative B (No Wilderness)
Recreation Opportunities	<p>In the area designated, there would be a small decrease in hunter use and other recreation using motorized vehicles. Users would move to nearby areas.</p> <p>In the area not designated, recreation activities would not be affected. Recreation use of the WSA and recreation opportunities in the region would not be affected.</p>	<p>Most recreation use in the WSA would not be affected. There would be no effect on recreation opportunities in the region.</p> <p>All of WSA is designated.</p>	<p>No part of the WSA is designated.</p> <p>Loss in wilderness values would have only a minor effect on the recreation activities which take place in the WSA (hiking, horseback riding, rockhounding, and photography).</p>
Livestock Grazing	<p>No effect on livestock management practices and numbers.</p> <p>Occasional inconvenience to livestock operator due to restriction on motorized vehicle use.</p> <p>Increased cost to livestock operators to construct and maintain range improvements.</p>	<p>No effect on livestock management practices and numbers.</p> <p>Occasional inconvenience to livestock operator due to restriction on motorized vehicle use.</p> <p>Increased cost to livestock operators to construct and maintain range improvements.</p>	<p>No effect on livestock management practices and numbers.</p> <p>Motorized vehicles would be allowed in connection with range management activities.</p>

HONEYCOMB BUTTES WSA

Primitive and Unconfined Recreation

Most primitive and unconfined recreation in the WSA is associated with hiking to enjoy the special features of the WSA. These activities would not be affected because the unique buttes would be in the 37,287-acre area designated which would not be affected except for up to 20 acres of disturbance from assessment work on existing mining claims. However, the level of satisfaction for people engaging in this type of recreation in the 3,261-acre area not designated would be reduced by disturbance created by 5 oil and gas wells (including 3 producing wells) and the noise created by motorized vehicles.

Special Features

The WSA contains multi-colored eroding buttes which provide very interesting scenery for a casual observer from outside the WSA, looking into the 37,287-acre area designated. Broad vistas add to this experience. From inside the WSA, the buttes provide a maze of interesting terrain through which to hike. While oil and gas activity would be allowed, it would not affect the steep-sided buttes. From north of the WSA, an observer may see oil and gas development in the foreground disrupting the broad view of the buttes. Rockhounding and fossil hunting would not be affected.

Conclusion

Naturalness, solitude, opportunities for primitive and unconfined recreation, and special features would be preserved in the 37,287-acre area designated. During oil and gas drilling, solitude and naturalness would be lost in the 3,261-acre area not designated. After drilling, solitude would return except when motorized vehicles use the roads (50 to 100 days annually). Naturalness and opportunities for primitive and unconfined recreation would be lost for the foreseeable future in this 3,261-acre area. Special features would be mostly preserved in the 3,261-acre area not designated.

Impacts to Oil and Gas Exploration and Production

In the 36,647 acres of Federal mineral estate designated, a projected 56.5 billion cubic feet (BCF) of natural gas (\$73 million) from 21 producing wells would be foregone.

A projected 7.7 BCF of gas would be recovered from 3 producing wells in the 3,261-acre area not designated (\$10 million).

Conclusion

An estimated 56.5 BCF of natural gas (\$73 million) from 21 producing wells would be foregone. This constitutes 0.11 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas). An estimated 7.7 BCF of natural gas (\$10 million) would be recovered from 3 producing wells.

Impacts to Wildlife Habitat

There would be no disturbance of big game habitat or raptor nesting in the 37,287-acre area designated (37,287 acres) because there would be no oil and gas activity and motorized vehicles would be prohibited.

Disturbance to wildlife habitat would take place in the area not designated (3,261 acres). The 5 wells and 35 acres of surface disturbance (including 3 miles of new roads) would displace big game. After reclamation of dry holes and areas not needed for production on the 3 producing wells, 12 acres would be occupied by oil and gas facilities and roads. The construction of roads to access oil and gas drilling locations in the area not designated would also increase motorized vehicle traffic associated with recreation. This would result in additional displacement of big game. Up to 20 acres of habitat would be disturbed as a result of assessment work on mining claims in the 37,287-acre area designated.

Antelope are least affected by surface-disturbing activities of any of the big game species in the WSA. Because the area not designated is small (3,261 acres), the effects of displacement on antelope would be minimal and would have no effect on antelope numbers. The assessment work on mining claims would take place during the summer. It would not affect antelope because the acreage disturbed is very small and the period when human activity would take place would be during the spring and summer when the relatively low level of activity would have minimal effect on the animals.

Mule deer are more sensitive to disturbance than antelope and may move $\frac{1}{2}$ to 1 mile away from a construction or drilling activity. The area not designated is in yearlong range for mule deer. The area designated is where the animals move in severe winters. Road construction and drilling activities for the 5 wells in this area would take place over 3 to 5 years. Since the area designated provides habitat for mule deer during the crucial winter period, and since the 3,261-acre area designated is relatively small, mule deer numbers would not be affected.

Elk use the northwestern portions of the WSA during the summer and move to the south-central por-

HONEYCOMB BUTTES WSA

tions of the WSA during the winter. They are generally displaced a greater distance from construction, drilling, or other human activities than other big game species. However, while elk are present in the WSA, their use is concentrated south of the cherry-stemmed road that separates the area designated (37,287 acres) from the area not designated (3,261 acres). Therefore, elk would not be adversely affected.

Conclusion

Approximately 55 acres of wildlife habitat would be directly lost due to surface disturbance from oil and gas activities and assessment work on mining claims. Big game would be displaced from the 3,261-acre area not designated into nearby areas, including the area designated, but numbers would not be affected.

Impacts to Recreation Opportunities

Hunter use would remain at current levels in the 37,287-acre area designated (30 hunter-days annually). Since most hunter use is for antelope and sage grouse, discontinued motor vehicle use in the area designated would not eliminate hunting in this area. Hunter use would increase from the current level of 10 hunter-days to 20 hunter-days annually due to the increased access provided by 3 miles of new road built for oil and gas operations. In the short term, the elimination of motor vehicle use and less human disturbance in the WSA would improve hunting quality. However, designation of 37,287 acres would not cause the herd unit populations (which occupy an area much larger than the WSA) to increase.

Most of visitor use in the WSA, not associated with hunting, is associated with activities that would not be adversely affected by development activities in the area not designated. Visitors to the WSA designated area would have to use boundary roads as points of departure into the WSA. This would detract from the recreation experience but would not result in a reduction in visitors to the WSA. Rockhounding, climbing, and spelunking are examples of these activities (100 visitor-days annually). Development activities are not expected to adversely affect off-highway vehicle (OHV) use in the area (100 visitor-days annually).

Conclusion

There would be no effect on recreation opportunities either in the WSA itself or in the region because current uses of the WSA would change very little. Hunter use would remain increase by 25 percent to 50 hunter-days annually.

Impacts to Livestock Grazing

Half of the 16 range improvements were constructed at least 10 years ago and are still functioning. This indicates that the frequency of maintenance on these improvements is relatively low. Every 1 to 3 years, one range improvement would be constructed or maintained. Current grazing use indicates the need for springs developments in the western portion of the WSA. These improvements can be constructed in conformance with nonimpairment criteria. The construction of springs developments and the infrequent maintenance of existing functional range improvements would help to maintain livestock distribution and numbers at 1,919 AUMs for cattle and 2,988 AUMs for sheep.

There would be an occasional inconvenience to the livestock operator because of the restrictions on motorized vehicle use in the 37,287 acres designated. The need to conform to nonimpairment criteria would increase costs to the livestock operator to construct and maintain range improvements.

Conclusion

Livestock use would continue at 1,919 AUMs for cattle and 2,988 AUMs for sheep. The need to meet nonimpairment criteria may increase costs for constructing and maintaining a range improvement every 1 to 3 years.

Unavoidable Adverse Impacts

Naturalness, solitude, and opportunities for primitive and unconfined recreation would be lost in the 3,261-acre area not designated. Approximately 32 acres of wildlife habitat would be lost for greater than a 10-year period.

Irreversible and Irrecoverable Commitments of Resources

A projected 7.7 BCF of gas would be recovered from 3 producing wells in the 3,261-acre area not designated. There would be no other irreversible or irretrievable commitments of resources.

Short-Term Uses versus Long-Term Productivity

Approximately 55 acres would be disturbed by mineral activity. When oil and gas wells go into production, approximately 23 acres would be reclaimed, leaving 32 acres disturbed beyond for longer than a 10-year period. This acreage is small

HONEYCOMB BUTTES WSA

and would not affect the long-term productivity of the WSA to provide wildlife habitat and forage for domestic livestock.

All Wilderness (41,188 acres designated)

All of the 41,188-acre Honeycomb Buttes WSA would be designated as wilderness. There would be no oil and gas leases issued for 40,764 acres of Federal mineral estate. Motorized vehicles would be prohibited in the entire WSA.

Impacts to Wilderness Values

Naturalness

Naturalness would be preserved in the entire WSA, except for up to 20 acres where assessment work on existing mining claims would result in surface disturbance. Oil and gas activities would not take place. The use of motorized vehicles (including over-snow vehicles) would be prohibited. Other recreation activities and use levels in the WSA would not change. These factors would help preserve wilderness values in the entire WSA.

While assessment activities on mining claims would continue, the development potential is low and it is anticipated that the claims would be abandoned within the next 5 to 10 years.

The potential limited vehicle use in connection with range management activities (2 to 4 trips annually) would not result in existing trails becoming more visible. New and maintained range improvements would meet nonimpairment standards and would not affect naturalness.

Solitude

Solitude would be preserved in the entire WSA because motorized vehicles would be prohibited and no oil and gas activities would occur. Assessment activity on mining claims would affect solitude for 2 to 3 weeks of the year for the next several years. After 10 years, existing claims would expire and solitude would be preserved in the entire WSA.

Primitive and Unconfined Recreation

Most primitive and unconfined recreation in the WSA is associated with hiking to enjoy the special features of the WSA. These activities would not be affected by any activities which would take place if the entire 41,188-acre WSA is designated.

Special Features

The WSA's special features, multi-colored eroding buttes which provide very interesting scenery for a casual observer, would not be affected by any activity proposed under All Wilderness. The maze of interesting terrain through which to hike would be preserved. Rockhounding and fossil hunting would not be affected.

Conclusion

Naturalness, solitude, primitive and unconfined recreation, and special features would be preserved in the entire WSA, except for on up to 20 acres of disturbance from assessment work on mining claims. Solitude would be adversely lost for 15 to 20 days annually due the assessment work and the use of motorized vehicles by livestock operators.

Impacts to Oil and Gas Exploration and Production

No exploration or development of oil and gas resources would take place in the 40,764 acres of Federal mineral estate in the WSA. A projected 64.2 BCF of natural gas (\$83 million) from 21 producing wells would be foregone. The opportunity to explore for oil and gas resources would be foregone.

Conclusion

There would no production of oil and gas from the 40,764 acres of Federal mineral estate in the WSA. A projected 64.2 BCF of natural gas from 21 producing wells would be foregone (\$83 million). This constitutes 0.13 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat

There would be no surface disturbance or human activity associated with the development of oil and gas resources in the WSA. Assessment work on existing mining claims would disturb up to a total of 20 acres in the WSA. Motorized vehicles (including over-snow vehicles) would be prohibited. Other recreation uses of the WSA are not expected to change. These factors would minimize adverse impacts to wildlife (including big game). No adverse impacts to wildlife habitat are expected.

Conclusion

Wildlife habitat would be preserved, except for on up to 20 acres of disturbance due to assessment work on mining claims.

HONEYCOMB BUTTES WSA

Impacts to Recreation Opportunities

About 70 to 90 percent of recreation use is in connection with nonhunting activities. Many of these users enjoy naturalness and solitude as an added attraction rather than a primary inducement to visit the area. Wilderness designation would neither increase nor decrease these opportunities. Wilderness values are of little importance to recreation users in the northern part of the WSA because it is the part of the WSA that contains the greatest amount of intrusions.

Hunting would remain at current levels of 40 hunter-days annually for antelope and sage grouse. Hunting for mule deer and elk in the WSA is less than 6 hunter-days annually.

Conclusion

There would be no effect on recreation opportunities because most of the current use is related to the special features of the WSA which would be preserved. Hunting would remain at the current level of 40 hunter-days annually for antelope and sage grouse.

Impacts to Livestock Grazing

Livestock use would continue at 1,919 AUMs for cattle and 2,988 AUMs for sheep from May 1 through November 30. Most range improvements were constructed at least 10 years ago and are still functioning. This indicates that the frequency of maintenance on these improvements is relatively low. Current grazing use indicates the need for spring developments in the western portion of the WSA. These improvements can be constructed in conformance with nonimpairment standards. The construction of springs developments and the infrequent maintenance of existing functional range improvements would help to maintain livestock distribution.

There would be an occasional inconvenience to livestock operators because of the restrictions on motorized vehicle use. These restrictions and the need to conform to nonimpairment criteria may increase costs to the livestock operator to construct and maintain needed range improvements.

Conclusion

Livestock use would continue at 1,919 AUMs for cattle and 2,988 AUMs for sheep from May 1 through November 30. The need to meet nonimpairment standards for constructing and maintaining range improvements would increase costs to livestock operators.

No Wilderness (No Action)

None of the 41,188-acre Honeycomb Buttes WSA would be designated as wilderness. The entire 40,764 acres of Federal mineral estate would be open to oil and gas leasing. Motorized vehicles would be limited to 8 miles of existing trails and 20 to 25 miles of new roads.

Impacts to Wilderness Values

Naturalness

Naturalness would not be protected where noise and visual intrusions such as pipelines, roads, etc., are allowed. Naturalness would be lost on 217 acres disturbed as a result of oil and gas activities and 20 acres disturbed as a result of assessment work on mining claims. The unique geological formations found in the buttes would not be affected because of steep slope restrictions placed on oil and gas leases. The large area of the WSA would make it easy to "hide" human intrusions. Of the 217 acres of surface disturbance due to oil and gas activities, 112 acres from dry holes and areas not needed for production would be reclaimed.

The use of motorized vehicles in connection with range management activities would be occasional and would not affect naturalness. Construction and maintenance of range improvements would not be required to meet nonimpairment standards. For this reason, naturalness may be adversely affected on 5 to 10 acres as a result of new range improvements. The occasional traffic would not result in existing trails becoming more visible.

Solitude

Solitude would decrease throughout the WSA due to the drilling of 31 oil and gas wells, production activities from 21 producing wells, assessment work on 14 existing mining claims, and trips into the area by livestock operators to check on livestock and to construct and maintain range improvements.

Primitive and Unconfined Recreation

Hiking, horseback riding, rockhounding, and photography in the WSA would remain at the current, relatively low levels of 100 visitor-days annually. While naturalness and solitude would be lost, access to the WSA would be improved by the addition of 20 to 25 miles of new oil and gas roads. This would offset the potential effect of the loss in solitude on primitive and unconfined recreation.

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Special Features

Oil and gas activities would increase access to the WSA and would result in increased motorized vehicle traffic. However, the roads would not affect the buttes or unique geologic formations which constitute a major part of the special features of the WSA.

Conclusion

Naturalness would be lost on 250 acres due to surface-disturbing activities associated with oil and gas activity, assessment work on mining claims, and construction and maintenance of range improvements. In the long term, naturalness would be lost on 135 acres after reclamation of areas disturbed by oil and gas activities. Solitude would be lost in the entire WSA but would return to most of the WSA when oil and gas wells go into production. The WSA's special features would not be affected, and the use of the WSA for primitive and unconfined recreation would not change.

Impacts to Oil and Gas Exploration and Production

A projected 64.2 BCF of natural gas (\$83 million) would be recovered from 21 producing wells on 40,764 acres of Federal mineral estate.

Conclusion

A projected 64.2 BCF of natural gas (\$83 million) would be recovered from 21 producing wells. This constitutes 0.13 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat

Construction and drilling activity associated with oil and gas development in the WSA has a potential for drilling 31 wells (21 producing wells) and constructing 20 to 25 miles of new roads over a 10-year period. Wildlife would be displaced from the areas disturbed. As construction and drilling are completed, displacement would be reduced. It is expected that when drilling in the area starts, it would take 10 years to develop the resources in the WSA. This factor would help mitigate adverse impacts to big game by minimizing the number of wells drilling or roads under construction at any one time. This would help to minimize the level of human activity and would mitigate the displacement of big game.

Motorized vehicles are restricted to existing roads. However, because of the increased access created by new oil and gas roads, increased motorized vehi-

cle traffic, not associated with oil and gas exploration and development, would result in increased displacement of big game.

The result of oil and gas activities and increased access would be to displace approximately 25 percent of the mule deer and 33 percent of the elk from the WSA until after the oil and gas wells go into production. Within 15 years, big game numbers in the WSA would approach current numbers. Antelope would be only minimally affected (less than 10 percent). The WSA accounts for 4 percent or less of the hunt area for each species of big game. The WSA constitutes about 4 percent of the hunt area for mule deer and 3.9 percent of the hunt area for antelope. There appears to be sufficient habitat in the hunt area to support the displaced big game; therefore, no effect on big game numbers is expected. Sage grouse would not be affected by this level because of the stipulations placed on oil and gas leases.

Predator numbers would not be affected by no wilderness management. The WSA is only a small portion of their wide-ranging domain, and the management of the WSA would have minimal effect on their numbers.

Conclusion

Approximately 25 percent of the mule deer, 33 percent of the elk, and less than 10 percent of the antelope would be displaced from the WSA until oil and gas wells go into production (10 years). There would be some disturbance to big game habitat and some displacement of big game to nearby areas. However, no effect on big game numbers is expected, because total disturbance in the hunt areas is expected to remain about the same.

Impacts to Recreation Opportunities

Motor vehicle use would be limited to 8 miles of existing roads and trails and the 20 to 25 miles of new roads. This restriction would not adversely affect recreation opportunities because there is currently very little use off existing roads and trails. Increased access created by roads constructed to reach oil and gas drilling locations, would enhance recreation opportunities for individuals who use motorized vehicles in connection with recreation, especially those related to hunting. Hunting opportunities would increase from 40 hunter-days annually to 65 hunter-days annually (for antelope and sage grouse) because of the increased access provided by 20 to 25 miles of oil and gas roads.

In the short term (5 years after the WSA is released to multiple use management), any increase or decrease in hunting quality would depend on fluctuation in

HONEYCOMB BUTTES WSA

tuations in herd unit populations which occupy an area much larger than the WSA and would depend more on weather than on any other factor. Pronghorn antelope constitute the major big game species in the WSA. Disturbance caused by oil and gas operations would have little effect on antelope because they are only slightly affected by development activities.

The quality of the recreation experience for 50 to 75 percent of the 100 visitor-days annually for non-hunting recreation would be reduced as a result of a loss in naturalness and solitude. However, the number of visitors to the WSA would not change from the present 100 visitor-days annually. While many of the visitor-days spent in the WSA are for nonwilderness recreation, wilderness values contribute to the quality of the other recreation experiences. The loss in the quality of the recreation experience would be offset by the increased access in the WSA.

Conclusion

Hunter use would increase to 65 hunter-days annually for antelope and sage grouse. Visitor use for non-hunting recreation would remain at the current levels of 100 visitor-days annually.

Impacts to Livestock Grazing

Livestock use would continue at 1,919 AUMs for cattle and 2,988 AUMs for sheep from May 1 through November 30. Most range improvements were constructed at least 10 years ago and are still functioning. This indicates that the frequency of maintenance on these improvements is relatively low. Current grazing use indicates the need for spring developments in the western portion of the WSA. Construction of springs developments and infrequent maintenance of functional range improvements would help maintain livestock distribution.

Existing range improvements that are still needed would continue to be maintained and reconstructed. Spring developments would be installed. Any new range improvements could be constructed without being constrained by having to meet the nonimpairment criteria.

Conclusion

There would be no impact to livestock grazing. Livestock use would continue at 1,919 AUMs for cattle and 2,988 AUMs for sheep from May 1 through November 30.

OREGON BUTTES WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Oregon Buttes WSA is in north-central Sweetwater County, approximately 30 miles northeast of Farson (Map OB-1). The WSA contains 5,700 acres comprised entirely of public land (Map OB-2). Included in the Oregon Buttes WSA are 3,335 acres of the 3,520-acre Oregon Buttes ACEC. Approximately 180 acres of the ACEC are in the Whitehorse Creek WSA. The remaining 5 acres of the ACEC are between the Oregon Buttes WSA and the Honeycomb Buttes WSA. The ACEC was designated primarily to maintain the area's scenic integrity as a historic landmark.

Proposed Action and Alternatives

Two alternatives are analyzed: 1) all of the 5,700-acre Oregon Buttes WSA would be wilderness (Proposed Action - All Wilderness), and 2) none of the 5,700-acre Oregon Buttes WSA would be wilderness (No Wilderness - No Action).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

Proposed Action (All Wilderness - 5,700 acres designated)

The Proposed Action is that all of the 5,700-acre Oregon Buttes WSA would be designated as wilderness. There would be no new oil and gas leases issued in the WSA. Motorized vehicles would be prohibited except for those associated with emergencies and grazing management.

In addition, State land (in section 16, T. 26 N., R. 101 W.) at the south end of the WSA (640 acres) contains values similar to those found in the WSA. If these lands were acquired, these lands would enhance manageability of the area as wilderness.

Private lands in section 34, T. 27 N., R. 101 W., immediately outside the northern boundary of the WSA contain values similar to those inside the WSA. If acquired, these lands would better define the northern boundary of the WSA.

Mineral Resources

Oil and Gas Exploration and Development

There are no existing oil and gas leases in the WSA. Oil and gas leasing would not resume on the 5,700 acres of Federal mineral estate.

Solid Mineral Exploration and Development

No mineral activity related to leaseables or salables would be allowed. There were locatable mining claims in the WSA, but the claims have been abandoned because of a lack of assessment work. The area would be closed to mineral location. Assessment work on new claims filed prior to wilderness designation would be restricted to operations that BLM determines satisfy the nonimpairment criteria (BLM Manual H-8550-1). No production of locatable minerals from the WSA is anticipated.

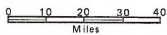
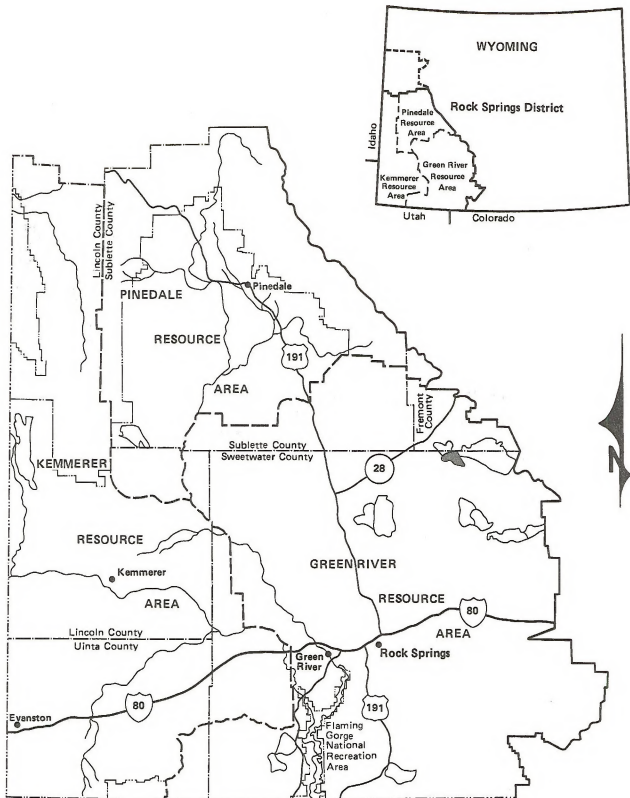
Off-Highway Vehicle Use (OHV)

The use of OHVs would be prohibited except in connection with valid existing rights. Use of OHVs may be allowed on a case-by-case basis for the maintenance of range improvements and range improvements and for annual assessment work on current mining claims.

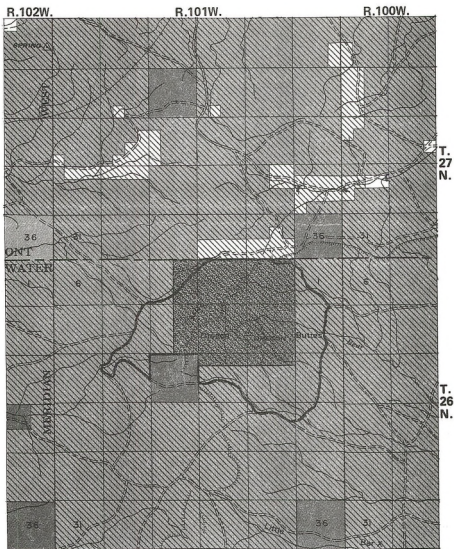
Recreation Use

Hunting would be allowed but motorized vehicles would not be allowed in the WSA. There would be approximately 50 hunter-days for antelope, 15 hunter-days for sage grouse, and 225 to 250 hunter-days annually for deer and elk.

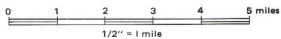
The major use of the WSA would continue to be day use (i.e., people visit the WSA during the day and drive elsewhere to spend the night). Approximately 250 visitor-days annually would be spent in the WSA for hiking, photography, and camping. Approximately 100 visitor-days annually are spent by people viewing the WSA from outside for the historic value of the view experienced by the emigrants on their way west.



Map OB-1
OREGON BUTTES WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



-  Wilderness Study Area Boundary
-  Oregon Buttes Cultural ACEC
-  Public Land (Administered by BLM)
-  Private Land
-  State Land
-  Federal Minerals



Map OB-2
LAND AND MINERAL STATUS
 Oregon Buttes WSA

OREGON BUTTES WSA

Grazing Use

Grazing management practices (Bush Rim grazing allotment) would not change from those currently in place. Within the Oregon Buttes WSA, the estimated carrying capacity of 383 AUMs for cattle and 380 AUMs for sheep would continue from May 1 to December 15. There are 4 reservoirs associated with 3 springs and 1 well. The springs associated with 2 of the reservoirs would be adequate to meet the needs of current cattle use. These reservoirs would probably not need to be maintained. No additional range improvements are planned. Where practical alternatives are not available, the occasional use of motorized equipment could be permitted on a case-by-case basis following an environmental analysis. Legitimate uses would be for the maintenance or replacement of existing improvements (e.g., water wells, reservoirs, etc.) or for emergency purposes.

Wildlife Habitat Management

No projects associated with wildlife management are planned in the WSA. No new oil and gas leases would be offered. Motorized vehicles, except those associated with valid existing rights, would be prohibited. These factors would help to maintain wildlife habitat in the WSA.

No Wilderness (No Action)

None of the Oregon Buttes WSA would be designated wilderness. Oil and gas leasing would resume on the 5,700-acre WSA. Motorized vehicles would be limited to 8 miles of existing trails and 2 to 3 miles of new roads constructed for oil and gas operations.

Mineral Resources

Oil and Gas Exploration and Development

Oil and gas leasing would resume on the entire 5,700 acres of Federal mineral estate in the WSA, with a No Surface Occupancy (NSO) stipulation on 2,855 acres in the Oregon Buttes ACEC. Other stipulations would be attached to new oil and gas leases to protect important wildlife habitat (530 acres of seasonal stipulations in elk calving areas). Four oil and gas wells would be drilled in the WSA and 2 to 3 miles of new road would be constructed (resulting in 28 acres of surface disturbance). Two wells would be dry holes and 2 would be producers (resulting in 10 acres of long-term surface disturbance).

Solid Mineral Exploration and Development

No mineral activity related to leasables or salables is anticipated. There were locatable mining claims in the WSA, but they were abandoned for lack of assessment work. However, no production from claims in the WSA is anticipated.

Off-Highway Vehicle Use (OHV)

OHV use would be allowed on 8 miles of existing trails and 2 to 3 miles of new roads. There would be a seasonal closure to motorized vehicles in the Oregon Buttes ACEC (3,335 acres) during elk calving season (March 1 through July 1). Use of OHVs would be allowed during the rest of the year for the maintenance of range improvements and range improvements.

OHV use would continue on State land immediately outside the southern boundary of the WSA and the private land immediately outside the northern boundary of the WSA.

Recreation Use

There would be little change in recreation management from management under the Proposed Action. Hunting would be allowed but motorized vehicles would not be allowed in the WSA. There would be approximately 50 hunter-days for antelope, 15 hunter-days for sage grouse, and 225 to 250 hunter-days annually for deer and elk.

The major use of the WSA would continue to be day use (i.e., people visit the WSA during the day and drive elsewhere to spend the night). Approximately 250 visitor-days annually would be spent in the WSA for hiking, photography, and camping. Approximately 100 visitor-days annually are spent by people viewing the WSA from outside only for the historic value of the view experienced by the emigrants on their way west.

Grazing Use

Grazing management practices (Bush Rim grazing allotment) would not change from those currently in place. Within the Oregon Buttes WSA, the estimated carrying capacity of 383 AUMs for cattle and 380 AUMs for sheep would continue from May 1 to December 15. There are 4 reservoirs associated with 3 springs and 1 well. The springs associated with 2 of the reservoirs would be adequate to meet the needs of current cattle use. These reservoirs would not need regular maintenance. No additional range improvements are planned.

OREGON BUTTES WSA

Wildlife Habitat Management

No projects associated with wildlife management are planned in the WSA. Oil and gas leases on 2,855 acres of the 3,335-acre ACEC within the WSA would contain an NSO stipulation. Oil and gas leases in the remainder of the ACEC (480 acres) would not contain the NSO stipulation (E½ of section 2, T. 26 N., R. 101 W.; and NE¼ of section 11). This would place NSO stipulations on 2,855 acres within the ACEC. Oil and gas leases in elk winter range and in elk calving areas (Map OB-3) would contain seasonal restrictions to protect big game during critical periods. Leases would also contain restrictions on surface disturbance on steep slopes, within 500 feet of ephemeral streams and 500 feet of live water, and near raptor nests. These actions would help maintain wildlife habitat in the WSA.

CHAPTER II - Affected Environment

Introduction

The buttes are a prominent landmark, rising out of the northwestern portion of the Red Desert to an elevation of 8,612 feet above sea level and 1,200 feet above the desert floor. Visibility from the butte tops is outstanding, offering scenic vistas including the Wind River Mountains on the north to the Uinta Mountain Range on the southwest. The buttes possess a wide variety of vegetation types, most notably limber pine stands. Small, thick, isolated stands of aspen are also present. Numerous seeps display wet meadows. The WSA contains valuable big game habitat (elk, mule deer, and pronghorn antelope), and is an important elk calving ground.

The Continental Divide runs through the Oregon Buttes. The Oregon Buttes ACEC (3,520 acres) will continue to be managed in accordance with the ACEC management plan (3,335 acres of the ACEC are within the Oregon Buttes WSA). Approximately 180 acres of the Oregon Buttes ACEC are in the Whitehorse Creek WSA and approximately 5 acres (in the northeast corner) are between the Oregon Buttes WSA and the Honeycomb Buttes WSA. The ACEC is managed primarily to protect historic integrity of the area and its wildlife values.

Wilderness Values

The Oregon Buttes WSA contains 5,700 acres and is entirely public land. The Oregon Buttes WSA

meets the criteria established in Section 2(c) of the Wilderness Act of 1964.

Naturalness

The Oregon Buttes WSA appears to be in an essentially natural condition. Closer inspection reveals 2 seismograph trails and 13 two-track trails, which cumulatively (approximately 12 miles of trails) reduce the naturalness of the WSA. However, all of these intrusions become obscure; some end as hazardous tire tracks across the hills and dry clay-like soil, others end abruptly at the top of a bench or saddle ridge, and others are overgrown with sagebrush and grass. A 2-track trail can be seen (from the road forming the boundary of the WSA) heading up one of the buttes and stopping in a grove of trees.

Solitude

Although the WSA is only 5,700 acres, opportunities for solitude are good. However, much of this is due to the undeveloped nature of the surrounding countryside. Outstanding opportunities for solitude are found in small groups of trees scattered around and partway up the buttes.






Primitive and Unconfined Recreation

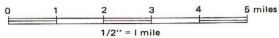
Opportunities for primitive and unconfined recreation are outstanding in the WSA. Being prime raptor habitat, the buttes provide bird watchers with a variety of species and uninterrupted observation. The WSA is also a prime area for scenic and wildlife photography, offering a unique variety of settings and subjects. Other recreation opportunities include hiking, rock climbing, rockhounding, backpacking, hunting, horseback riding, and sightseeing.

Special Features

A great number of supplemental values are found in this WSA. Small pieces of petrified wood are abundant. The Oregon Buttes is a dominating landform which is historically important. The buttes were a major landmark for travelers of the Oregon Trail, which is located less than 7 miles to the north of the WSA. Emigrants viewed the buttes as the halfway point on their journey from Independence, Missouri, to the Pacific Ocean. The buttes mark the point where the emigrants passed over the Continental Divide and into the Pacific watershed. Nearly 300,000 emigrants passed this point on their way west between 1843 and 1863. The southern part of



-  Wilderness Study Area Boundary
-  Oregon Buttes Cultural ACEC
-  Elk Summer Range
-  Elk Winter Range
-  Elk Calving Area



Map OB-3
ELK HABITAT
Oregon Buttes WSA

OREGON BUTTES WSA

3the buttes is on State land, but the view of the butte from the south is not the view of the buttes that has the major historic significance.

The western portion of the WSA is used as a calving area by the only desert elk herd (Sands elk herd) in Wyoming. The WSA contains excellent raptor habitat and several known nest sites. There are historic peregrine falcon aeries on the west face of Oregon Buttes. Immature peregrine falcons are infrequently seen there during raptor surveys.

The area contains a variety of vegetation types, most notably limber pine stands. The remains of Indian tipi rings can be found in the Oregon Buttes ACEC portion of the WSA.

Mineral Resources

Hydrocarbons are the most valuable potential mineral resources of the WSA. Both source rocks and potential reservoir rocks are found in the WSA. The area has moderate to high oil and gas development potential. The most probable recoverable reserves estimated to exist within the 5,700-acre WSA are 8.8 billion cubic feet (BCF) of natural gas. Maximum recoverable reserves were calculated from the "Wyoming Geological Association Guidebook, Greater Green River Basin Symposium" (WGA 1973). It was estimated that there could be 3.32 BCF (billion cubic feet) of recoverable gas per 640 acres explored in the Green River Basin (15,046 square miles). This amounts to a total recoverable reserves in the Green River Basin of about 50,000 BCF of gas.

The Buccaneer Unit #1 well in section 23, T. 26 N., R. 102 W. (approximately 3 miles southwest of the WSA), was used to determine the most probable reserves. Although it has never been produced, due the lack of a pipeline in the are, extensive well testing shows very favorable reserves. Deeper formations, tested only by 1 well in section 8, T. 26 N., R. 101 W., also show good potential for production. This potential may not be realized in the near future due to excessive drilling depths, the lack of a pipeline in the area, and the risks involved in drilling stratigraphic reservoirs. There are 2 depleted producers in section 24, T. 27 N., R. 101 W. Oil and gas produced from the WSA would most likely come from deeper formations.

There are no oil or gas wells in the WSA and 7 dry holes have been drilled within a 6-mile radius of the WSA. The 2 wells, drilled in excess of 17,000 feet just southwest of the WSA, tested good potentials in the deeper Cretaceous Formations. One well in section 8 was plugged as uneconomic.

All of the WSA is within a U.S. Geological Survey coal classification order and within a coal lands

withdrawal by Executive Order (November 15, 1910). The Oregon Buttes WSA has low potential for the economic development of the coal resource. There is a potential for the occurrence of a coal-bearing sequence at depths in excess of 2,300 to 5,000 feet. No coal beds outcrop within the WSA.

Some oil shale occurs in the Wilkins Peak and Laney Shale members of the Green River Formation in the WSA, but the beds are thin and low grade. The oil shale resource has low development potential in the Oregon Buttes WSA.

North of the WSA on the southeast edge of the Prospect Mountains, uranium mineralization occurs in sandstone and conglomerate that are probably in the Wasatch Formation. In the WSA, the formations of major interest appear to be Tertiary in age. A large portion of the WSA has been claim staked for uranium. However, no development has occurred and none is foreseen.

Sediment deposits of Quaternary age sand and gravel outcrop in the vicinity of Oregon Buttes. There is no nearby development and subsequently no demand for these resources which have a low development potential. The deposits could be used as a gravel source if development increases in the vicinity of these deposits. The resource would then have a higher development potential.

Some gold deposits have been found to the north of the WSA. No such deposits have been found in the WSA. The WSA did contain locatable mining claims but they have been abandoned due to the lack of completing annual assessment work on the claims.

Wildlife

Pronghorn antelope use the WSA during the summer. Mule deer use the WSA during the summer and linger until the late fall, when bad weather may force them to head south. The area is one of the few remaining calving areas (Map OB-3) used by the Sands elk herd. These elk use the area summer long, and remain in the western part of the WSA (crucial elk winter range) during the winter.

The Oregon Buttes WSA (5,700 acres) constitutes 0.3 percent of the 1,999,076-acre Steamboat elk hunt area; 0.4 percent of the 1,295,248-acre Steamboat mule deer hunt area; and 0.7 percent of the 858,181-acre Eden pronghorn antelope hunt area.

Raptor habitat in the WSA is excellent (Map OB-4), due to the availability of suitable nesting sites. Intensive inventories revealed 6 prairie falcon aeries and 1 red-tailed hawk nest. Evidence of great horned owls has been found in the area, although nest loca-

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tions have not been identified. Historically, peregrine falcons nested on the buttes, but they have not done so since 1965.

Mountain lions and bobcats use the entire WSA; however, they are not considered common. Coyotes are common throughout the WSA. Porcupines also occupy the WSA.

The ponds created by Edmund Springs immediately north of the northwest corner of the WSA serve as a source of livestock and wildlife water. These water sources are on private land near where the Oregon Buttes WSA meets the Honeycomb Buttes WSA. Another pond about ¼ mile off the western boundary of the ACEC, within the WSA, also serves as a good source of water. Snow drifts remain in parts of the WSA until April. Numerous seeps result in wet meadows. These provide a good supply of water throughout the year.

The Oregon Buttes WSA was surveyed for prairie dog towns in 1982. No prairie dog towns were observed. There was an active peregrine falcon aerie until 1965. A 1983 survey revealed that it was no longer in use. There is no suitable habitat for bald eagle, whooping crane, Colorado squawfish, or humpback chub.

Recreation

Opportunities for primitive and unconfined recreation are outstanding in the Oregon Buttes WSA. It is prime raptor habitat and provides an excellent opportunity for birdwatching, with a variety of species and an opportunity for uninterrupted observation provided by the solitude that currently characterizes the WSA. The WSA also provides a good opportunity for scenic and wildlife photography. Other recreation opportunities include rock climbing, backpacking, hunting, horseback riding, and sightseeing. Approximately 200 visitor-days annually are spent in the WSA for nondeveloped recreation.

Estimates of use for the hunt areas in which the Oregon Buttes WSA (5,700 acres) is located include 229 hunter-days in the 1,999,076-acre Steamboat elk hunt area; 1,832 hunter-days in the 1,295,248-acre Steamboat mule deer hunt area; and 2,097 hunter-days in the 858,181-acre Eden pronghorn antelope hunt area. Current hunter use is approximately 200

hunter-days annually for deer and elk, 50 hunter-days annually for antelope, and 15 to 20 hunter-days annually for sage grouse.

Livestock Grazing

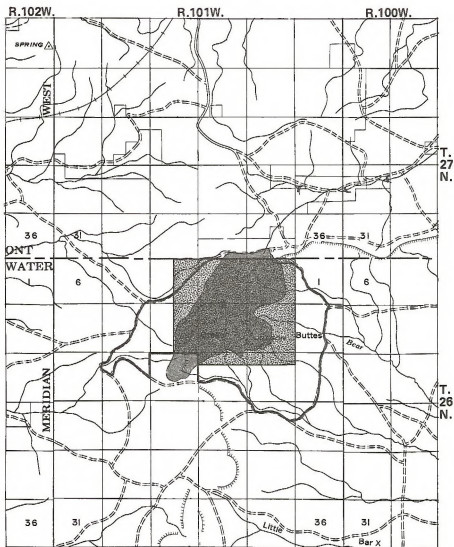
Current use of the WSA is mostly by cattle, although trailing of sheep also occurs, especially in the eastern part of the WSA. Grazing use in the WSA (Bush Rim grazing allotment) is 383 AUMs for cattle and 380 AUMs for sheep from May 1 to December 15. There are 4 reservoirs associated with 3 springs and one well. The springs associated with 2 of the reservoirs meet the needs of current cattle use.




There are 3 reservoirs associated with 2 springs and 1 well. All are within ¼ mile of the boundary. The springs associated with 2 of the reservoirs meet the needs of current livestock use. Water sources at Edmund Springs are on private land outside the northwest corner of the WSA. They are just off the road which forms the northern boundary of the Oregon Buttes WSA. A water source (in the western portion of the WSA, just outside the western boundary of the Oregon Buttes ACEC) is just off the trail that separates the Oregon Buttes WSA from the Whitehorse Creek WSA. There is another water source just off the road that forms the southern boundary of the WSA, and immediately to the east of the State land.

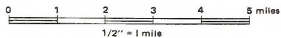
CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of the environmental consequences of the All Wilderness (Proposed Action) and No Wilderness alternatives. The actions were analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-10 summarizes the impacts by alternative.



-  Wilderness Study Area Boundary
-  Oregon Buttes Cultural ACEC
-  Active Raptor Habitat



Map OB-4
RAPTOR HABITAT
 Oregon Buttes WSA

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TABLE 2-10
SUMMARY OF IMPACTS OREGON BUTTES WSA

	Proposed Action (All Wilderness)	Alternative A (No Wilderness)
Public Lands Designated	5,700 acres	0 acres
Other Lands	Approximately 320 acres of State land outside the southern boundary of the WSA would be added, if acquired.	None
Area of Critical Environmental Concern (ACEC)	The WSA contains 3,335 acres of the Oregon Buttes ACEC.	The WSA contains 3,335 acres of the Oregon Buttes ACEC, 2,855 acres with a No Surface Occupancy stipulation.
Wilderness Values		
Naturalness	Naturalness protected in the entire WSA.	Naturalness protected in the ACEC where NSO stipulations would be attached to oil and gas leases (2,855 acres). Naturalness lost on 28 acres in the rest of the WSA due to oil and gas activity.
Solitude	Solitude protected in the entire WSA.	Solitude lost due to drilling of 4 oil and gas wells and motorized vehicle activity on new access roads.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation protected in the entire WSA.	Opportunities for primitive and unconfined recreation preserved in most of the ACEC due to NSO stipulations on 2,855 acres and seasonal closure to motorized vehicles (March 1 to July 1) on 3,335 acres. Opportunity for primitive and unconfined recreation lost later in the summer.
Special Features	Special features, including those associated with the ACEC and the historic integrity of the area, would be protected in the entire WSA.	Special features, including those associated with the ACEC and the historic integrity of the area, would be protected in the entire WSA.
Minerals		
Oil and Gas	Approximately 8.8 BCF of natural gas (\$11.4 million) foregone.	8.8 BCF natural gas (\$11.4 million) expected in deeper formations would not be recovered in the short term.
Wells In WSA Not Designated	0	4
Surface Disturbance In WSA Not Designated	0 acres	28 acres
Solid Minerals	No potential	No potential

OREGON BUTTES WSA

TABLE 2-10 (Continued)
SUMMARY OF IMPACTS OREGON BUTTES WSA

	Proposed Action (All Wilderness)	Alternative A (No Wilderness)
Wildlife Habitat Populations	No effects on wildlife.	Some displacement of big game. Impacts are expected to be minor, in part because of small size of WSA. No change in big game populations.
Recreation Opportunities	Motor vehicle related recreation would be eliminated in the WSA. This impact would be minor. Rockhounding would remain at current levels. Recreation opportunities in the region would not be affected.	Visitor use in the WSA would not be affected. The number of hunter-days would remain about the same.
Livestock Grazing	No effect on grazing management practices or use. Occasional inconvenience to livestock operator due to restrictions on motorized vehicle use. Motorized vehicles would be allowed in connection with grazing management practices.	No effect on grazing management practices or use. Occasional inconvenience to livestock operator due to restrictions on motorized vehicle use. Motorized vehicles would be allowed in connection with grazing management practices.

Proposed Action and Alternatives

Proposed Action (All Wilderness - 5,700 acres designated)

The Proposed Action is to designate all of the 5,700-acre Oregon Buttes WSA as wilderness. Oil and gas leases would not be issued. Motorized vehicles would be prohibited in the WSA.

Impacts to Wilderness Values

Naturalness

Naturalness would be protected on the entire 5,700-acre WSA because wilderness management precludes all but essential OHV use in connection with valid existing rights and prohibits oil and gas leasing. No mineral activities would be allowed. No range improvements would be built. Therefore, no activities would occur which would result in a loss of naturalness.

Solitude

Solitude would be protected on the entire 5,700-acre WSA because wilderness management precludes all but essential OHV use in connection with valid existing rights and prohibits oil and gas leasing. No mineral activities would be allowed. No range improvements would be built. Therefore, no activities would occur which would result in a loss of solitude.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation would be maintained in the entire 5,700-acre WSA. There would be an increase in the number of hunter-days spent in the WSA because the area would retain its naturalness. Big game would be displaced into the WSA from oil and gas operations which would occur outside the WSA, increasing big game numbers by 20 to 25 percent. This would increase hunter success and the attractiveness of the WSA to hunters. Deer and elk hunting would increase from the current level of 200 hunter-days annually to 225 to 250 hunter-days annually over the next 50 years. The number of hunter-days spent in the WSA for antelope (50 hunter-days annually) and sage grouse (15 to 25 hunter-days annually) would remain at current levels.

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Rockhounding would remain at current levels. Overall use of the WSA for nondeveloped recreation would increase from the current level of 200 visitor-days annually to 225 to 250 visitor-days annually. This increase would occur because the WSA would retain the natural character it possessed when it was passed by the emigrants heading west. Most of the increased visitation would be from people outside the region. The historic character of the area would be an important factor in attracting non-local visitors to the WSA. It would be one facet of the larger attraction of the Oregon Trail.

Special Features

The special features of the WSA would be protected. The major special feature in the Oregon Buttes WSA is the historic nature of the view of the Oregon Buttes from the Oregon Trail to the north. The historic integrity of the view would be preserved. The biological diversity of the area including big game and raptors would also be preserved under wilderness designation.

Conclusion

Designation of the 5,700-acre Oregon Buttes WSA would preserve all wilderness values associated with the WSA (naturalness, solitude, primitive and unconfined recreation, and special features associated with the historic integrity of the area and its biological diversity).

Impacts to Oil and Gas Exploration and Production

There would be no oil and gas production from the WSA because no oil and gas leases would be issued. The opportunity to explore for oil and gas resources would be lost. A projected 8.8 BCF of natural gas (\$11.4 million) from 2 producing wells would be foregone.

Conclusion

A projected 8.8 BCF of natural gas (\$11.4 million) from 2 producing wells would be foregone. This constitutes 0.02 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat and Populations

There would be no activity associated with oil and gas activities, and motorized vehicles (including

over-snow vehicles) would be prohibited. These factors would minimize alteration of wildlife habitat and disturbance to the animals during critical periods in the entire WSA. Due to oil and gas activity outside the WSA, big game numbers in the WSA would increase by 20 to 25 percent. However, the big game numbers in the herd area, of which the WSA is a small part, would not be affected.

Raptor productivity would remain the same. Wilderness management would have no impact on the large predator species because these species have low populations and very large ranges.

Conclusion

Wildlife habitat would be maintained in the entire 5,700-acre WSA. Important wildlife species (big game, raptors, and predators) would not be disturbed by human activity in the WSA. Big game numbers in the WSA would increase by 20 to 25 percent; however, big game numbers in the herd unit would not change.

Impacts to Recreation Opportunities

There would be an increase in the number of hunter-days spent in the WSA annually for deer and elk because the area would retain its natural character. No oil and gas activities would take place. Existing trails would become less visible. Deer and elk hunting in the WSA would increase from the current level of 200 hunter-days annually to 225 to 250 hunter-days annually. The number of hunter-days spent in the WSA for antelope (50 hunter-days annually) and sage grouse (15 to 20 hunter-days annually) would remain at current levels.

Rockhounding would remain at current levels. Overall recreation for nondeveloped recreation would increase from the current level of 200 visitor-days annually to 225 to 250 visitor-days annually. This increase would occur because the WSA would retain the natural character it possessed when the emigrants headed west. Most of the increased visitation would be from people outside the region stopping by the area on their way elsewhere and those specifically interested in visiting important points along the Oregon Trail.

Conclusion

Hunter use would increase from the current 270 hunter-days annually to 295 to 320 hunter-days annually. Other nondeveloped recreation would increase from the current level of 200 visitor-days annually to 225 to 250 visitor-days annually.

OREGON BUTTES WSA

Impacts to Livestock Grazing

Current grazing use of 383 AUMs for cattle and 380 AUMs for sheep would continue from May 1 to December 15. There appears to be adequate water within the 5,700-acre WSA and within 1/2 mile around the WSA boundary on the northeast, south, and west. While occasional maintenance of the well and 1 reservoir may be required, they are readily accessible with only minimal, short-term impact to wilderness values. The springs are expected to continue to provide water for livestock use. Wilderness designation would result in an occasional inconvenience to livestock grazing practices but no changes in livestock numbers would be required.

Conclusion

There would be no impacts to livestock grazing. Current grazing use of 383 AUMs for cattle and 380 AUMs for sheep would continue from May 1 to December 15.

Unavoidable Adverse Impacts

A projected 8.8 BCF of natural gas (\$11.4 million) from 2 producing wells would be foregone. There would be no other unavoidable adverse impacts.

Irreversible and Irrecoverable Commitments of Resources

There would be no irreversible or irretrievable commitments of resources.

Short-Term Uses versus Long-Term Productivity

The long-term productivity of the WSA would be maintained.

No Wilderness (No Action)

None of the 5,700-acre Oregon Buttes WSA would be designated as wilderness. Oil and gas leasing would resume in the entire 5,700-acre WSA with an NSO stipulation on 2,855 acres in the Oregon Buttes ACEC. Motorized vehicles would be limited to 8 miles of existing trails and 2 to 3 miles of new roads.

The likelihood for some oil and gas activity to occur is relatively high. This assumption is based on testing of the Buccaneer Unit #1 well, about 2.5 miles to the southwest of the WSA. Although the well was never produced, well-testing showed favorable reserves of gas.

Impacts to Wilderness Values

Naturalness

The construction of roads, drill pads, and other surface-disturbing activities associated with 4 oil and gas wells would result in a loss in naturalness on 28 acres. After the 2 dry holes and areas not needed for production on the 2 producing wells are reclaimed, naturalness would be lost for the long-term on 10 acres. Oil and gas leases in most of the ACEC (2,855 acres) would have NSO stipulations, protecting naturalness in the ACEC.

Although statutory protection would not be afforded the area, wilderness values (unique values and naturalness) would be protected within most of the Oregon Buttes ACEC because of the restrictive stipulations on oil and gas operations and because the steep slopes prevalent in the ACEC make oil and gas development difficult. Naturalness and solitude would not be preserved in 20 to 25 percent of the ACEC because of oil and gas operations. The occasional traffic associated with livestock management activities would not result in existing trails becoming more visible.

Any of the existing range improvements that would require maintenance are easily accessible from existing trails in the WSA. No new range improvements are planned. Therefore, range management activities would not affect naturalness.

Solitude

Four oil and gas wells would be drilled. During drilling, solitude would be lost within 1/2 mile of the well. An area 1/2 mile around producing wells would continue to experience a loss in solitude for the next 30 to 50 years.

The use of motorized vehicles in connection with livestock management would be occasional and would not affect solitude except during the short period of time when the activity is taking place (no more than a day or two per year).

Primitive and Unconfined Recreation

Some of the natural character of the area would be lost. The seasonal closure of the ACEC (3,335 acres in the WSA) to motorized vehicles between March 1 and July 1 would help to preserve opportunities for primitive and unconfined recreation during the spring. Later in the summer, when motorized vehicles would be present in the WSA, the opportunities for primitive and unconfined recreation would be reduced.

Four oil and gas wells would be drilled. During drilling, opportunities for primitive and unconfined recreation would be lost within 1/2 mile of the well. An

OREGON BUTTES WSA

area ¼ mile around producing wells would continue to experience a loss in primitive and unconfined recreation opportunities for the next 30 to 50 years.

Special Features

The ACEC management plan would reduce or eliminate the adverse impacts from oil and gas activities to the historic integrity of the ACEC as a landmark. The major special feature in the Oregon Buttes WSA is the historic nature of the view of the Oregon Buttes from the Oregon Trail to the north. The historic integrity of the view would be preserved because of the NSO stipulations on oil and gas leases in 2,855 acres of the Oregon Buttes ACEC.

Two parcels in the ACEC would not have NSO stipulations (E½ of section 2, T. 26 N., R. 101 W.; and NE¼ of section 11, T. 26 N., R. 101 W.). These lands are lower in elevation and wells sites would not generally be seen from the vicinity of the Oregon Trail, to the north of the WSA. The historic integrity of the view of the buttes would be preserved.

The biological diversity of the area including big game and raptors would also be preserved under Alternative A. There would be seasonal stipulations on oil and gas leases to protect big game winter range and calving areas. Other stipulations would protect raptor nests and sage grouse. There would be a seasonal closure for motorized vehicles between March 1 and July 1 in the elk calving area.

Conclusion

Naturalness would be lost on 28 acres for the short-term and 10 acres for the long-term. Solitude and opportunities for primitive and unconfined recreation would be lost for ¼ mile surrounding 4 oil and gas wells while the wells are drilling and for ¼ mile surrounding the 2 producing wells for the long-term. The WSA's special features would be preserved.

Impacts to Oil and Gas Exploration and Production

The most probable oil and gas reserves recovered from the WSA is 8.8 BCF of natural gas (\$11.4 million) from 2 producing wells.

Conclusion

Approximately 8.8 BCF of natural gas (\$11.4 million) would be recovered from 2 producing wells. This represents only about 0.02 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat and Populations

Although the Oregon Buttes ACEC was designated in part to protect wildlife habitat, it is doubtful the ACEC management prescriptions would afford wildlife full protection from surface-disturbing activities. However, the closure to motorized vehicles during the elk calving season (March 1 through July 1) would help protect the elk.

Steep slopes predominate the center of the WSA and there would be an NSO stipulation on 2,855 acres. This would make the construction of access roads and well sites more complicated and expensive. When the 4 oil and gas wells are drilled, big game would be displaced into adjacent areas. The closure of the area to motorized vehicles during the elk calving season would mitigate adverse impacts to elk during a critical season. As drilling is completed, 2 well pads are reclaimed, and 2 wells go into production, the displacement of big game would be reduced.

Raptor productivity would not change, due to stipulations requiring buffer zones around nest sites or seasonal restrictions.

Conclusion

Big game would be displaced into adjacent areas when the 4 oil and gas wells are drilled. After reclamation and during production from 2 wells, displacement of big game would be almost eliminated.

Impacts to Recreation Opportunities

Seasonal closures to motorized vehicles would protect the values of the WSA and Oregon Buttes ACEC (3,335 acres). Vehicle accessibility in the WSA would be limited to existing trails and the 2 to 3 miles of new roads to oil and gas well sites. Hunting in the WSA for deer and elk would decrease from 200 hunter-days annually to 125 to 150 hunter-days annually. Hunter use would remain at current levels: 50 hunter-days annually for antelope, and 15 to 20 hunter-days annually for sage grouse.

The number of hiking visitor-days would be reduced slightly. However, the Oregon Buttes ACEC encompassing the buttes would continue to be desirable for hiking. It is expected that rockhounding activities would remain at current levels. Overall recreation use for nondeveloped recreation would decrease from the current level of 200 visitor-days annually to 150 to 175 visitor-days annually because of the reduced naturalness and solitude.

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Conclusion

Hunter use would decrease from the current 270 hunter-days annually to 220 hunter-days annually. Nondeveloped recreation would decrease from 200 visitor-days annually to 150 to 175 visitor-days annually.

Impacts to Livestock Grazing

Current grazing use of 383 AUMs for cattle and 380 AUMs for sheep would continue from May 1 to December 15. There appears to be adequate water

within the 5,700-acre WSA and within ½ mile around the WSA boundary on the northeast, south, and west. While occasional maintenance of the range improvements in the WSA may be required, they are readily accessible. No new range improvements are planned.

Conclusion

There would be no impact to livestock grazing. Current grazing use of 383 AUMs for cattle and 380 AUMs for sheep would continue from May 1 to December 15.

WHITEHORSE CREEK WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Whitehorse Creek WSA is in southeastern Fremont County and north-central Sweetwater County, about 30 miles northeast of Farson (Map WH-1). This 4,028-acre WSA contains many different habitats and landscapes, such as aspen and pine groves; high, sheer sandstone cliffs; and badland topography. The WSA is comprised entirely of public land (Map WH-2). Included in the Whitehorse Creek WSA are 180 acres of the 3,520-acre Oregon Buttes Area of Critical Environmental Concern (ACEC).

Since the Final Inventory Report (USDI 1981a), 26 acres of split estate (Federal surface, State minerals) were removed from the western portion of the WSA (section 36, T. 27 N., R. 102 W.) because of manageability problems. The acreage analyzed as inside the WSA in the Revised Draft EIS and this Final EIS is 4,002 acres.

Proposed Action and Alternatives

Two alternatives were analyzed: 1) none of the 4,002-acre Whitehorse Creek WSA would be wilderness (Proposed Action - No Wilderness - No Action), and 2) all of the 4,002-acre Whitehorse Creek WSA would be wilderness.

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

Proposed Action (No Wilderness - No Action)

The Proposed Action is to designate none of the 4,002-acre Whitehorse Creek WSA as wilderness. Oil and gas leasing would resume in the WSA. Management of the area would emphasize protection of the historic and wildlife values in accordance with the Oregon Buttes ACEC management plan.

Mineral Resources

Oil and Gas Exploration and Development

Oil and gas leasing would resume on 4,002 acres of Federal mineral estate. Oil and gas exploration and development would be allowed. Oil and gas leases in the Oregon Buttes ACEC (180 acres in the Whitehorse Creek WSA) would include No Surface Occupancy stipulations. Leases would be conditioned to restrict surface disturbance during the spring (to protect watershed and water quality) and on steep slopes. A stipulation to protect raptors would be included in leases in the southeastern portion of the WSA (approximately 800 acres). There would be a seasonal restriction and motor vehicle closure in elk calving habitat.

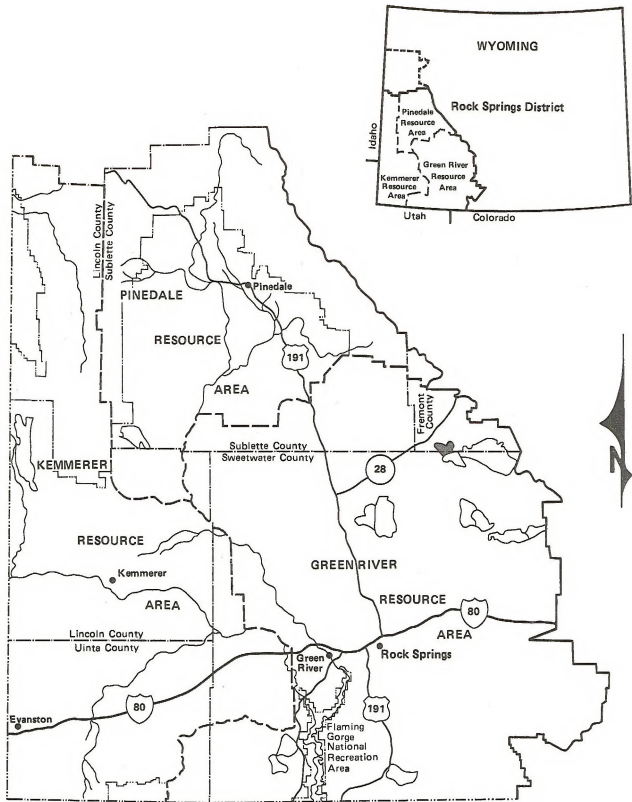
There would be a potential for 7 wells to be drilled, resulting in 49 acres of surface disturbance. Three of these wells would be dry holes and 4 would be producing wells. Producing wells would occupy a total of 15 to 20 acres in the WSA for the life of the wells. Approximately 3 to 5 miles of new roads would be built to reach oil and gas well sites. An estimated 6.2 billion cubic feet (BCF) of natural gas would be recovered.

Solid Mineral Exploration and Development

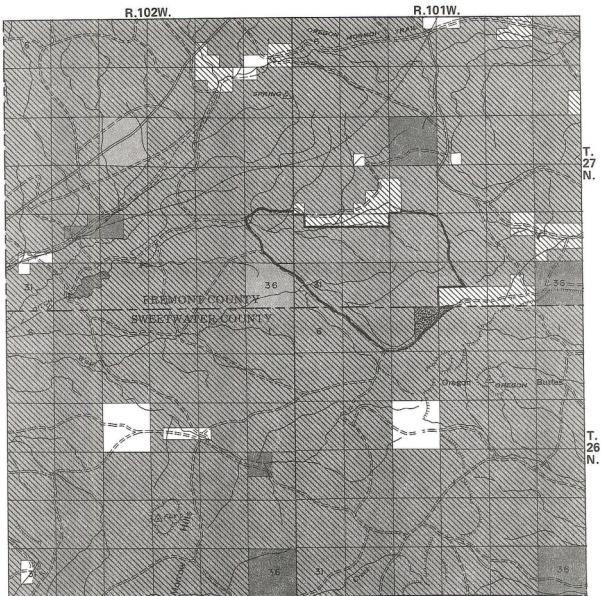
The area would be open to leasable and salable minerals; however, no activity is anticipated. Although coal, oil shale, uranium, and gold may be present, their development potential is low. There were several placer gold claims in the WSA. There is no evidence of any 1988 assessment activity. Any assessment work on new claims filed prior to a Congressional decision not to designate the Whitehorse Creek WSA would be restricted to operations that BLM determines satisfy the nonimpairment criteria (BLM Manual H-8550-1). No production from the WSA is anticipated. The U.S. Geological Survey Mineral Report for the Honeycomb Buttes WSA, the western boundary of which begins 2 miles east of the Whitehorse Creek WSA, indicates that any locatable minerals are probably subeconomic (USGS 1987). This assessment appears to apply to the Whitehorse Creek WSA as well.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be limited to ¼ mile of existing trails and approximately 3 to 5 miles of new roads to oil and gas well sites. There would be a seasonal closure to motorized vehicles in the Oregon Buttes ACEC (180 acres) from March 1 through July 1 to protect raptors.









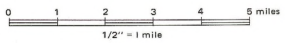
Map WH-1
WHITEHORSE CREEK WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



T. 27 N.

T. 26 N.

-  Wilderness Study Area Boundary
-  Oregon Buttes Cultural ACEC
-  Public Land (Administered by BLM)
-  Private Land
-  State Land
-  Federal Minerals



Map WH-2
LAND AND MINERAL STATUS
 Whitehorse Creek WSA

WHITEHORSE CREEK WSA

Recreation Use

Hunting would be allowed, but motorized vehicles would be limited to ¼ mile of existing trails and 3 to 5 miles of new roads. Hunting use in the short term would be 25 to 30 hunter-days annually for sage grouse, 15 to 20 hunter-days annually for pronghorn antelope, and 55 to 60 hunter-days annually for deer and elk. In the long term, hunter use for antelope would remain about the same. Hunter use for deer and elk would be about 15 to 20 hunter-days annually.

No developments associated with recreation are anticipated. The existing recreation uses in the WSA would remain the same. The major uses of the WSA would continue to be day use (i.e., people drive to the WSA for the day, then drive elsewhere to spend the night). Approximately 50 visitor-days would be spent in the WSA for nondeveloped recreation.

Grazing Use

Grazing management practices (Bush Rim and Pacific Creek grazing allotments) would not change from those currently in place. Within the Whitehorse Creek WSA, the estimated carrying capacity of 311 AUMs for cattle and 366 AUMs for sheep would continue from May 1 to November 15. There are 8 range improvements in the WSA, including 2 reservoirs that have been washed out and 1 dam that has been breached. No additional range improvements are planned, but the existing ones would need to be maintained. Maintenance would involve the use of heavy equipment to maintain the reservoirs. Each reservoir would be maintained every 5 to 10 years. In combination with maintaining water wells and other range improvements, there would be 1 to 2 trips annually, for up to 6 days annually, for maintenance and reconstruction of range improvements. In addition, 2 to 4 trips annually would be made using a pickup truck or similar vehicle to check on livestock.

Wildlife Habitat Management

No projects associated with wildlife management are planned in the WSA. Oil and gas leases in the Oregon Buttes ACEC (180 acres in the Whitehorse Creek WSA) would include NSO stipulations. Leases would be conditioned to restrict surface disturbance during the spring (to protect watersheds and water quality) and on steep slopes. A stipulation to protect raptors would be included in leases in the southeastern portion of the WSA. There would be a seasonal restriction and motor vehicle closure in elk calving habitat. These actions would help to maintain wildlife habitat and minimize human activity during crucial time periods.

All Wilderness (4,002 acres designated)

All of the 4,002-acre Whitehorse Creek WSA would be designated as wilderness. There would be no oil and gas leases issued. Therefore, there would be no surface disturbance associated with oil and gas exploration and development. Motorized vehicles would be prohibited in the WSA, except for emergency purposes or limited use in connection with grazing management practices.

In addition, there are approximately 160 acres of private land on the eastern boundary of the WSA (where the Whitehorse Creek WSA meets the Oregon Buttes WSA) which contain similar values to the WSA. These lands would be added to the wilderness area in the event they are acquired. The inclusion of these lands would result in a more manageable and better defined boundary for the wilderness area.

Mineral Resources

Oil and Gas Exploration and Development

The 4,002 acres of Federal mineral estate in the WSA would not be leased for oil and gas. There are no pre-FLPMA oil and gas leases in the WSA. No exploration or development would occur.

Solid Mineral Exploration and Development

No activity related to salable or leasable minerals would be allowed. The area would not be open to mineral location. There were locatable mining claims in the WSA, but the claims were abandoned because of a lack of assessment work. The filing of new mining claims would not be allowed after wilderness designation. Any assessment work on claims filed prior to wilderness designation would be restricted to operations that BLM determines satisfy the nonimpairment criteria (according to BLM Manual H-8550-1). Any locatable minerals are probably sub-economic, based on a mineral report prepared by the U.S. Geological Survey for the Honeycomb Buttes WSA (USGS 1987). The western boundary of the Honeycomb Buttes WSA begins 2 miles east of the Whitehorse Creek WSA; therefore, this assessment appears to apply to the Whitehorse Creek WSA as well. No production from the WSA is anticipated.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would be prohibited in the entire WSA, except for emergency purposes or limited use in connection with grazing management practices (4 to 8 trips annually).

WHITEHORSE CREEK WSA

Recreation Use

Management would be the same as under the Proposed Action, except that hunters would not be allowed to use motorized vehicles. The major uses of the WSA would continue to be day use (90 to 100 visitor-days annually). People would drive to the WSA for the day, then drive elsewhere to spend the night. There would be 25 to 30 hunter-days annually for sage grouse, 15 to 20 hunter-days annually for pronghorn antelope, and 55 to 60 hunter-days annually for deer and elk.

Grazing Use

Grazing management practices (Bush Rim and Pacific Creek grazing allotments) would not change from those currently in place. Within the Whitehorse Creek WSA, the estimated carrying capacity of 311 AUMs for cattle and 366 AUMs for sheep would continue from May 1 to November 15. There are 8 range improvements in the WSA, including 2 reservoirs that have been washed out and 1 dam that has been breached. No additional range improvements are planned, but the existing ones would need to be maintained. Each reservoir would be maintained every 5 to 10 years. In combination with maintaining water wells and other range improvements, there would be 1 to 2 trips annually, for up to 6 days annually, for maintenance and reconstruction of range improvements. In addition, 2 to 4 trips annually would be made using a pickup truck or similar vehicle to check on livestock. Where practical alternatives are not available, the occasional use of motorized equipment could be permitted on a case-by-case basis following an environmental analysis to maintain existing range improvements.

Wildlife Habitat Management

No projects associated with wildlife management are anticipated in the WSA. No new oil and gas leases would be offered. Livestock management activities related to the maintenance of range improvement would occur. These factors would result in the maintenance of existing wildlife habitat.

CHAPTER II - Affected Environment

Introduction

The WSA is used for livestock grazing and for wildlife observation, hunting, rockhounding, and his-

toric interest. A major portion of the WSA is made up of a group of eroding red, green, and gray buttes similar to the Honeycomb Buttes WSA nearby. Topography in the central and western sections consists of a flat, sage-covered basin, rimmed by sheer mud and clay escarpments rising to 100 feet above the valley floor. Valuable big game habitat (elk, mule deer, and pronghorn antelope) is found within the area.

The Oregon Buttes ACEC (3,520 acres) will continue to be managed in accordance with the ACEC management plan (180 acres of the ACEC are in the Whitehorse Creek WSA). Approximately 3,335 acres of the ACEC are in the Oregon Buttes WSA. About 5 acres are between the Oregon Buttes and Honeycomb Buttes WSAs. The ACEC will be managed primarily to protect historic and wildlife values.

Wilderness Values

The WSA contains 4,002 acres and is entirely public land (with 26 acres of split estate). It is separated from the Oregon Buttes WSA by only a 2-track trail. The inventory unit was retained as a wilderness study area and was evaluated in conjunction with the Oregon Buttes WSA. On the basis of the intensive inventory, the Bureau determined that the Whitehorse Creek WSA met the criteria in Section 2(c) of the Wilderness Act of 1964.

Naturalness

The majority of the WSA is in an almost pristine natural condition. A few obscure 2-track trails enter the WSA for a few hundred yards in several locations (total of $\frac{1}{4}$ mile of existing trails).

Solitude

Opportunities for solitude are particularly high in areas west of the Continental Divide, north of Oregon Buttes, and south of Pastel Butte. From the top of the largest butte in the area, which rises 650 feet above the basin floor and 7,915 feet above sea level, a sense of isolation and solitude is felt as one looks down into the maze-like setting created by the eroded escarpments lining the Whitehorse Creek Basin.

Primitive and Unconfined Recreation

Particularly outstanding opportunities for primitive and unconfined recreation include rock climb-

WHITEHORSE CREEK WSA

ing and studying the unique badland topography of Whitehorse Creek. Other excellent recreational opportunities of the WSA include nature and wildlife photography, bird watching, and big game hunting. Current use of the WSA for day use (nondeveloped recreation) is approximately 75 visitor-days annually.

Special Features

There is a wide variety of wildlife species in the WSA. The badlands are laced with petrified wood, agate beds, and fossils of snails and clams, which provide outstanding rockhounding values. Oregon Buttes is a dominating landform which was viewed by emigrants using the Oregon Trail as the halfway point on their journey from Independence, Missouri, to the Pacific Ocean. The Buttes also marked the Continental Divide and the point where emigrants passed into the Pacific watershed. The WSA contains good raptor habitat. Prairie falcons and red-tailed hawks have been found in the WSA.

Mineral Resources

The WSA contains both source rocks and potential reservoir rocks for oil and gas and is considered to have moderate development potential for oil and gas. The most probable recoverable reserves estimated to exist within the WSA are 6.2 billion cubic feet (BCF) of natural gas (based on the assumptions described below).

The Buccaneer Unit #1 well (section 23, T. 26 N., R. 102 W.), was used to determine the most probable reserves. Although it has never been produced, due to the lack of a pipeline in the area, extensive well-testing shows very favorable reserves. Deeper formations, tested by one other well in section 8, T. 26 N., R. 101 W., also show good potential for production. This potential may not be realized in the near future due to deep drilling depths, the lack of a pipeline in the area, and the risks involved in drilling stratigraphic formations.

The maximum recoverable reserves estimate was calculated from figures in the "Wyoming Geological Association Guidebook, Greater Green River Basin Symposium" (WGA 1973). In that study, it was estimated that there are 3.32 BCF (billion cubic feet) of gas per 640 acres explored in the Green River Basin (15,046 square miles). This amounts to total recoverable reserves in the Green River Basin of about 50,000 BCF of gas.

There are no oil or gas wells in the WSA and 11 dry holes have been drilled within a 6-mile radius of the WSA. Two wells, drilled in excess of 11,000 feet

just southwest of the WSA, tested good potential in the deeper Cretaceous Formations, and only the well in section 8 was plugged as uneconomic.

All of the WSA is included within a USGS coal classification order and within a coal lands withdrawal by Executive Order (November 15, 1910). The Whitehorse Creek WSA has low potential for the economic development of the coal resource. There is a potential for the occurrence of a coal-bearing sequence at depths in excess of 2,300 to 5,000 feet. No coal beds outcrop within the WSA.

There are oil shale beds in the Wilkins Peak Member of the Green River Formation in the WSA, but these beds are thin and low grade. The oil shale resource has a low development potential in the WSA.

North of the WSA, on the southeast edge of the Prospect Mountains, uranium mineralization occurs in sandstone and conglomerate that are probably in the Wasatch Formation. Part of the WSA has been staked for uranium and most of these claims are pre-FLPMA. At present, there is no development of the uranium in the WSA. The WSA has a low development potential for economic deposits of uranium.

There are no current mining claims in the WSA. Earlier claims appear to have been staked on conglomerate deposits occurring in the Wasatch Formation but there was no 1988 assessment work. The claims were abandoned. Gold has a low development potential for the WSA.

Wildlife

Valuable big game habitat is found within the area. Pronghorn antelope use the WSA during the summer. Mule deer use the WSA during the summer and linger until the late fall, when bad weather may force them to migrate south. Elk use the WSA during the summer, and remain in the southwestern portion of the WSA during the winter. Elk also use a very small area in the southeast portion of the WSA for calving, one of the few suitable calving areas that the Sands elk herd has left.

The Whitehorse Creek WSA (4,002 acres) constitutes 0.2 percent of the 1,999,076-acre Steamboat elk hunt area; 0.3 percent of the 1,295,248-acre Steamboat mule deer hunt area; and 0.5 percent of the 858,181-acre Eden pronghorn antelope hunt area.

Good raptor habitat is present in the WSA. Spot inventories have been conducted and numerous raptor nests were noted (prairie falcon and red-tailed hawk). Mountain lion habitat is generally limited to the southeastern sections of the WSA. Bobcats use

WHITEHORSE CREEK WSA

the entire WSA; however, both bobcats and mountain lions are not considered to be common. Foxes occur in the northwestern tip of the WSA, and coyotes are common throughout the WSA.

The Whitehorse Creek WSA has not been surveyed for prairie dog towns. There is potential habitat in the western portion of the WSA. The WSA was surveyed for peregrine falcons in 1983 and 1984 with no demonstrated occurrence. There is no suitable habitat for the bald eagle, whooping crane, Colorado squawfish, or humpback chub.

Recreation Opportunities

Estimates of use for the hunt areas in which the Whitehorse Creek WSA (4,002 acres) is located include 229 hunter-days in the 1,999,076-acre Steamboat elk hunt area; 1,832 hunter-days in the 1,295,248-acre Steamboat mule deer hunt area; and 2,097 hunter-days in the 858,181-acre Eden pronghorn antelope hunt area. Antelope (15 to 20 hunter-days annually), deer and elk (55 to 60 hunter-days annually), and sage grouse (25 to 30 hunter-days annually) are all hunted in the WSA. Current use of the WSA for day use (nondeveloped recreation) is approximately 75 visitor-days annually for rock-hounding, sightseeing, photography, and hiking.

Livestock Grazing

Grazing capacity in the Whitehorse Creek WSA (in the Bush Rim and Pacific Creek grazing allotments) of 311 AUMs for cattle and 366 AUMs for sheep would continue from May 1 to November 15. There are 8 range improvements in the WSA, including 2 reservoirs that have been washed out and 1 dam that has been breached. Current use of the Whitehorse Creek WSA is for cattle. Cattle numbers have been kept below permitted numbers for the past several years. Within the foreseeable future, they could be expected to rise and come closer to permitted numbers. Existing range improvements support current grazing management practices and permitted grazing capacity but may not support activation of full preference by livestock operators.

Water Resources

Existing range improvements support current actual use of the Whitehorse Creek WSA. They would need to be maintained to enable the livestock operator to operate at livestock numbers that ap-

proximate permitted numbers. The existing range improvements help ensure good distribution of livestock within the WSA and encourage livestock use in several drainages which provide good forage in the eastern part of the WSA. If some of these water sources are no longer available, actual use may not be able to increase to permitted numbers while maintaining current range condition.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of the impacts of the No Wilderness (Proposed Action) and All Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-11 summarizes the impacts by alternative.

Proposed Action and Alternatives

Proposed Action (No Wilderness - No Action)

The Proposed Action is that none of the 4,002-acre Whitehorse Creek WSA is recommended as suitable for wilderness designation. There would be a potential for 7 oil and gas wells to be drilled in the WSA, resulting in 49 acres of surface disturbance. Motorized vehicles would be limited to existing roads and trails. Approximately 3 to 5 miles of new roads would be constructed to reach oil and gas well sites.

The likelihood for oil and gas activity to occur in the area is relatively high in the long term. This assumption is based on the results of testing the Buccaneer Unit #1 well (section 23, T. 26 N., R. 102 W.). Although it has never been produced, due in part to the lack of a pipeline in the area, extensive well-testing shows very favorable reserves. While it is likely that development would take place, it is not likely to occur in the near future even if the area is opened to oil and gas leasing. A success ratio was

WHITEHORSE CREEK WSA

TABLE 2-11
SUMMARY OF IMPACTS WHITEHORSE CREEK WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Public Lands Designated	0 acres	4,002 acres
Other Lands	None	None
Area of Critical Environmental Concern (ACEC)	180 acres of the Oregon Buttes ACEC are within the WSA.	180 acres of the Oregon Buttes ACEC are within the WSA.
Wilderness Values		
Naturalness	Naturalness lost for the short term due to maintenance of 8 range improvements and for the long term due to drilling of 7 oil and gas wells.	Naturalness lost for the short term due to maintenance of 8 range improvements.
Solitude	Solitude lost for the short term due to maintenance of 8 range improvements and for 30 years due to 4 producing oil and gas wells.	Solitude lost for the short term due to maintenance of 8 range improvements.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation would be lost.	Opportunities for primitive and unconfined recreation maintained in the entire WSA.
Special Features	The view of the colorful eroded escarpment would be preserved; however, the undisturbed condition of the area surrounding the escarpments would be lost.	Special features would be protected in the entire WSA.
Minerals		
Oil and Gas	6.2 BCF natural gas (\$8 million) found in deeper formations would be recovered but not in the near future.	6.2 BCF natural gas (\$8 million) would be foregone.
Wells in WSA Not Designated	7	0
Surface Disturbance in WSA Not Designated	49 acres	0 acres
Solid Minerals	No potential	No potential
Wildlife Habitat and Populations	Some displacement of elk and deer in the WSA.	No effect on wildlife, including big game. Topography, seasonal restrictions, and NSO restriction in eastern part of WSA would mitigate impacts in elk calving area. Herd unit occupies a much larger area, so numbers would not be affected. As activity ceases, animals would return.

WHITEHORSE CREEK WSA

TABLE 2-11 (Continued)
SUMMARY OF IMPACTS WHITEHORSE CREEK WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Recreation Opportunities	When development takes place, there would be a decrease in hunting quality and a decrease in hunter-days spent in the WSA. Other recreation opportunities would not be affected.	Hunter-days in the WSA would decrease, but the number of hunter-days spent in the WSA is presently low. Other recreation opportunities would not be affected.
Livestock Grazing	No effect on grazing use.	Livestock operator's ability to maintain existing improvements would be impaired. Distribution of livestock and eventually carrying capacity and numbers would be reduced. Occasional inconvenience to livestock operators due to restriction on vehicle use.

not estimated because the fact that the testing results were positive were offset by 2 other factors: (1) no oil or gas wells exist within the WSA, and (2) 11 dry holes were drilled within a 6-mile radius of the WSA.

Impacts to Wilderness Values

Naturalness

The construction of roads, drill pads, and other surface-disturbing activities associated with mineral exploration and development would change the topography and appearance of the area. Oil and gas leases in the ACEC (180 acres) would have NSO stipulations. These would preserve naturalness in the ACEC and the historic integrity of the ACEC as a landmark.

Solitude

Solitude in the WSA would be lost due to the use of motorized vehicles in connection with oil and gas activities and recreation on the few short trails that lead into the WSA and on the 3 to 5 miles of new roads built in connection with oil and gas exploration and development.

The use of motorized vehicles in connection with range management activities would be occasional and would not affect solitude except for the short period of time when the activities are taking place (probably no more than a day or two). These activities would probably be necessary once or twice annually for up to 6 days. The occasional traffic would not result in existing trails becoming more visible, and therefore, would not adversely affect naturalness.

Primitive and Unconfined Recreation

Current use levels of the WSA for primitive and unconfined recreation are limited (75 visitor-days annually). If the WSA were not designated wilderness, virtually all of this recreation use would be lost. Much of the lost recreation use would likely shift to nearby, similar areas such as the Oregon Buttes WSA.

Special Features

The views that can be seen looking into the WSA include eroded escarpments in interesting colors. This is particularly evident looking into the WSA from the north. If the WSA is not designated wilderness, the undisturbed condition of the area surrounding the escarpments would be lost. This would take away from the unique nature of the area.

WHITEHORSE CREEK WSA

Conclusion

Wilderness values, including naturalness, solitude, primitive and unconfined recreation, and special values, would be lost until oil and gas production is completed and the area is allowed to return to its current undisturbed condition.

Impacts to Oil and Gas Exploration and Production

A projected 6.2 BCF of natural gas (\$8 million) would be recovered from 4 producing wells. However, because the reserves are expected to be found in deeper formations, it is not likely they would be recovered in the near future. As market conditions change and the price of natural gas increases, drilling in the vicinity of the WSA is likely to increase.

Conclusion

Approximately 6.2 BCF of natural gas (\$8 million) would be recovered from 4 producing wells in the WSA. This represents less than 0.01 percent of the estimated reserves in the Green River Basin (50,000 BCF of natural gas).

Impacts to Wildlife Habitat and Populations

Approximately 49 acres of wildlife habitat would be directly disturbed as a result of oil and gas activities and 3 to 5 miles of new roads constructed to reach oil and gas well sites. Oil and gas exploration and development activity would not take place in the short term (within the next 5 years). When exploration and development activity commences, there would be some displacement of big game animals into adjacent areas. However, the Whitehorse Creek WSA (4,002 acres) is small and big game populations in the area are not expected to be affected. As construction and drilling activity is completed and production starts, the displacement of animals would be reduced. Recreation activities in the WSA are at very low levels and are not expected to change if the WSA is not designated wilderness. Hunting is the primary recreation use and hunters are expected to use the WSA at current levels.

Because the far eastern portion of this WSA is used for elk calving, surface-disturbing activities could cause some displacement of the desert elk herd (the herd unit occupies an area much larger than the WSA). The no surface occupancy restrictions in the Oregon Buttes ACEC and the closure of the ACEC to motorized vehicles during elk calving season (May 1 through June 30) would help mitigate adverse impacts to elk during this crucial period.

An increase in surface-disturbing activities may cause a 10 percent decrease in the number of deer occupying the WSA. Because pronghorn antelope are more tolerant to disturbance, populations within the WSA are not expected to change.

It is anticipated that raptor productivity would be the same, due to stipulations requiring buffer zones around nest sites, seasonal restrictions (March 1 through June 30) on motorized vehicles in the Oregon Buttes ACEC (180 acres).

Implementation of the Proposed Action (No Wilderness) would have no impact on the large predator species (bobcats, mountain lions, and coyotes). Because these species have low populations and very large ranges, the potential disturbance in the WSA would cause them to avoid portions of the area where activity is taking place.

Because of the small acreage that would be disturbed (49 acres) by oil and gas activities, no impacts to wildlife populations are expected.

Conclusion

Forty-nine acres of wildlife habitat would be directly disturbed (slightly over 1 percent of the WSA). There would be some displacement of big game when the level of human activity associated with oil and gas activity is highest. However, in part because of the small size of the WSA, such activity is not expected to affect big game populations in the area.

Impacts to Recreation Opportunities

Motorized vehicle access would be limited to existing roads and trails, with seasonal closures in the ACEC. The number of hunter-days spent in the WSA would not be affected over the short term because this limitation currently exists and the area contains several trails used annually during hunting season. In the long term, when oil and gas development occurs, there would be a decrease in hunting quality and in the number of hunter-days spent in the WSA for deer and elk from the current 55 to 60 hunter-days annually to 30 to 35 hunter-days annually. The reduction is relatively high (about 50 percent) because of the small size of the WSA. The number of hunter-days spent in the WSA for antelope (15 to 20 hunter-days annually) and sage grouse (25 to 30 hunter-days annually) are expected to remain at current levels.

Recreation use associated with nondeveloped recreation would be reduced from the current 75 visitor-days annually to about 50 visitor-days annually because the increased disturbance in the WSA would make it less attractive to visitors.

WHITEHORSE CREEK WSA

Conclusion

There would be a 50 percent reduction in hunter-days for deer and elk (to 55 to 60 hunter-days annually). Hunter use for antelope (15 to 20 hunter-days annually) and sage grouse (25 to 30 hunter-days annually) would continue. There would be a 33 percent reduction in the number of visitor days spent in the WSA for rockhounding, sightseeing, photography, and hiking (to 50 visitor-days annually).

Impacts to Livestock Grazing

Livestock grazing would continue at permitted use of 311 AUMs for cattle and 366 AUMs for sheep. Livestock operators would be able to maintain or reconstruct existing range improvements which are necessary to maintain or increase current actual use to permitted numbers. These range improvements would continue to provide good distribution of livestock up several drainages in the WSA. This would help to maintain the current range condition in the WSA. These activities would involve the use of heavy equipment. The maintenance and reconstruction would not be constrained by nonimpairment standards or motorized vehicle restrictions.

Conclusion

Livestock grazing would continue at permitted use of 311 AUMs for cattle and 366 AUMs for sheep. Livestock operators would be able to maintain or reconstruct existing range improvements which are necessary to maintain or increase current actual use to permitted numbers using heavy equipment.

Unavoidable Adverse Impacts

Approximately 20 acres would be occupied by 4 producing gas wells and associated access roads and facilities. Naturalness, solitude, and opportunities for primitive and unconfined recreation would be lost throughout the WSA for producing life of the gas wells. Hunter use would decline by 55 to 60 hunter-days annually (for deer and elk).

Irreversible and Irrecoverable Commitments of Resources

Approximately 6.2 BCF of natural gas (\$8 million) would be recovered from 4 producing wells. There would be no other irreversible or irretrievable commitments of resources.

Short-Term Uses versus Long-Term Productivity

The occupancy of 20 acres by oil and gas wells would remove those acres from wildlife habitat and livestock forage for the producing life of the wells. However, the continued maintenance and reconstruction of existing range improvements would help maintain livestock distribution and reduce livestock pressure in some parts of the WSA. This would enable livestock operators to increase actual use in the WSA while maintaining wildlife habitat. This would enhance the long-term productivity of the WSA to serve as wildlife habitat and to provide forage for domestic livestock.

All Wilderness (4,002 acres designated)

All of the 4,002-acre Whitehorse Creek WSA would be designated as wilderness. Oil and gas leases would not be issued. Therefore, there would be no surface disturbance associated with oil and gas activities. Motorized vehicles would be prohibited in the WSA.

Impacts to Wilderness Values

Naturalness

Naturalness would be preserved in the WSA because no oil and gas activity would occur, the limited vehicle use in connection with range management activities would not result in existing trails becoming more visible, and any other range management activities would meet the nonimpairment criteria. However, if heavy equipment is needed for maintenance activities on the 8 range improvements, some additional adverse impacts could occur.

Solitude

Solitude would be preserved in the WSA. Motorized vehicles would be prohibited except in limited circumstances in connection with range management practices. This use would be limited and would only affect solitude for a short period, up to 6 days annually, when maintenance of reservoirs or other range improvements is needed. Solitude would be lost for up to 6 days.

WHITEHORSE CREEK WSA

Primitive and Unconfined Recreation

The opportunities for primitive and unconfined recreation would be preserved in the WSA. Current use levels are relatively low and are expected to increase from 75 visitor-days annually to 90 to 100 visitor-days annually.

Special Features

The special features of the WSA associated with the views would be preserved if the WSA is designated wilderness because surface-disturbing activities would be excluded from the WSA.

Conclusion

Naturalness and solitude would be lost for the short term due to maintenance of range improvements. Other wilderness values would remain essentially unchanged.

Impacts to Oil and Gas Exploration and Production

There would be no oil and gas production from the WSA because no oil and gas leases would be issued on the 4,002 acres of Federal mineral estate. The opportunity to explore for oil and gas resources would be lost. The most probable recoverable reserves foregone would be 6.2 BCF of natural gas (\$8 million).

Conclusion

There would be no oil and gas production from the WSA. Approximately 6.2 BCF of natural gas (\$8 million) would be foregone. This amount is less than 0.01 percent of the estimated reserves in the Green River Basin (50,000 BCF of gas).

Impacts to Wildlife Habitat and Populations

There would be no surface disturbance associated with oil and gas development because no new oil and gas leases would be issued. The area is currently unleased. Recreation activities are expected to remain at their current low levels. It is anticipated that big game populations in the WSA would remain at current levels.

The closure of the area to motorized vehicles (including over-snow vehicles), except for those associated with valid existing rights, would eliminate adverse impacts to big game from such activities.

Conclusion

There would be no adverse impacts to wildlife habitat or populations because no additional surface disturbance or changes in use of the WSA are expected.

Impacts to Recreation Opportunities

The current level of use (75 visitor-days annually) would increase to 90 to 100 visitor-days annually for nondeveloped recreation. Recreation use of the WSA using motorized vehicles is less than 25 to 30 visitor-days annually. This use would be lost if the WSA is designated wilderness.

The number of hunter-days spent in the WSA for deer and elk would remain about the same. Levels of use for antelope (15 to 20 hunter-days annually) and sage grouse (25 to 30 hunter-days annually) would remain about the same.

Conclusion

The WSA would remain in its natural state and would be more attractive to nondeveloped recreationists and to hunters (especially for deer and elk). Current visitor use of the WSA for recreation associated with motorized vehicles (25 visitor-days annually) would be lost. There would be an overall increase in recreation use in the WSA of about 20 percent.

Impacts to Livestock Grazing

Livestock grazing would continue at permitted use of 311 AUMs for cattle and 366 AUMs for sheep. The livestock operators' ability to maintain range improvements would be adversely affected because of limitations on motorized vehicles under wilderness management. This may result in an inability of the livestock operator to reach permitted numbers of livestock and maintain the current range condition. Current levels on nonuse of permitted AUMs would continue. Current livestock distribution would not be maintained.

Conclusion

Livestock grazing would continue at permitted use of 311 AUMs for cattle and 366 AUMs for sheep. This may result in an inability of the livestock operators to reach permitted numbers of livestock and maintain the current range condition.

DEVILS PLAYGROUND - TWIN BUTTES WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Devils Playground - Twin Buttes WSA is west of the Flaming Gorge National Recreation Area in Sweetwater County (Map DP-1). It is characterized by highly eroded badlands devoid of vegetation, and by high outcrops. The most prominent outcrops are Black Mountain and Twin Buttes, which are examples of exposed Bridger Formation capped with Bishop Conglomerate. The WSA encompasses 23,841 acres of public land (Map DP-2), including 1,715 acres of split estate (Federal surface, State minerals).

Since the Final Inventory Report (USDI 1981a), 435 acres of split estate (Federal surface, State minerals) were removed from the boundary of the WSA (section 16, T. 13 N., R. 109 W.) because of manageability problems. The acreage analyzed as inside the WSA in the Revised Draft EIS and this Final EIS is 23,841 acres.

Proposed Action and Alternatives

Two alternatives were analyzed: 1) all of the 23,841-acre WSA would be wilderness (Proposed Action - All Wilderness); and 2) none of the 23,841-acre Devils Playground-Twin Buttes WSA would be wilderness (No Wilderness - No Action).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

Proposed Action - All Wilderness (23,841 acres designated)

All of the 23,841-acre Devils Playground-Twin Buttes WSA would be designated as wilderness. Oil and gas leases would not be issued on 22,561 acres of Federal mineral estate. Motorized vehicles would be prohibited.

Mineral Resources

Oil and Gas Exploration and Development

Oil and gas leasing on 22,561 acres of Federal mineral estate would not resume. There are no pre-FLPMA oil and gas leases in the WSA. Therefore, no oil and gas activity would take place.

Solid Mineral Exploration and Development

No activity related to salable minerals would be allowed. The WSA would be closed to mineral location and leasing.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would not be allowed in the WSA, except for up to 4 trips annually (using existing trails) by livestock operators to check on livestock and 2 to 3 days every 5 years to maintain the 6 reservoirs in the WSA.

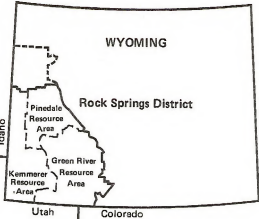
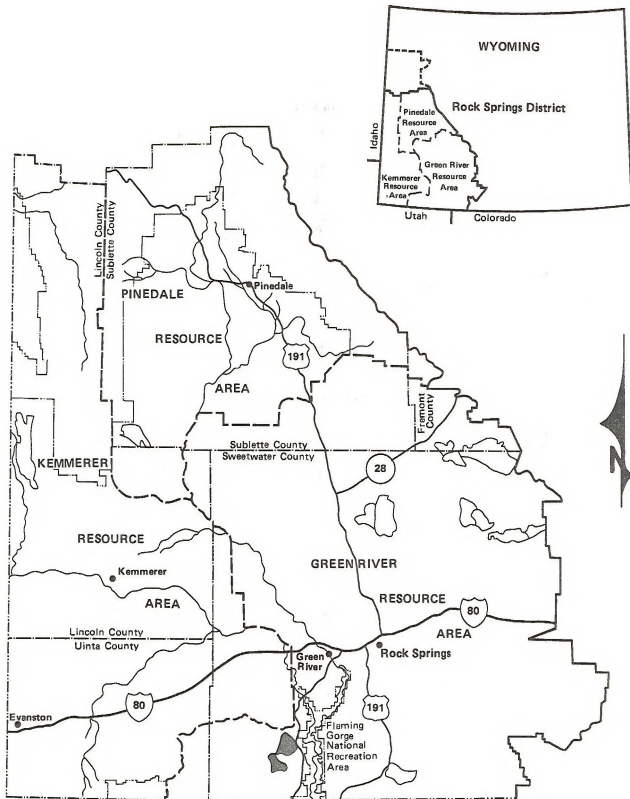
Recreation Use

The existing recreation uses in the WSA would remain the same (25 hunter-days annually for antelope and mule deer). There would be approximately 25 visitor-days annually of non-hunting recreation (virtually all rockhounding).

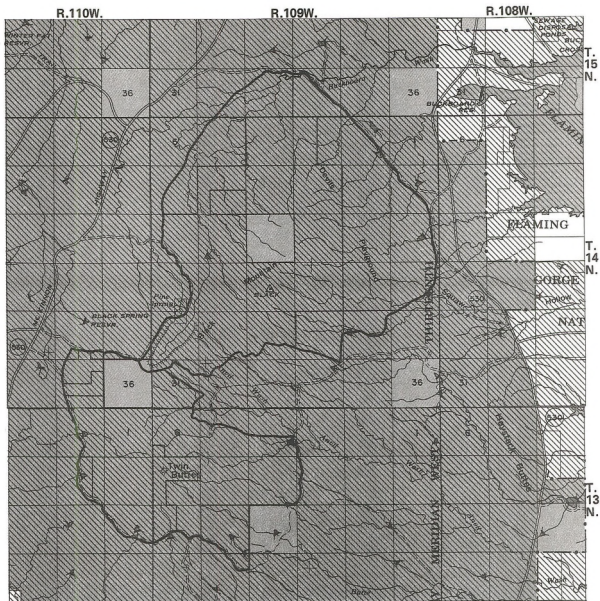
Hunters and other visitors would not be allowed to use motorized vehicles.






Grazing Use

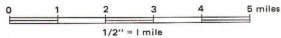
Grazing management practices (Henrys Fork grazing allotments) would not change from those currently in place. Within the Devils Playground-Twin Buttes WSA, the estimated carrying capacity of 1,420 AUMs for cattle and 168 AUMs for sheep would continue from May 1 to December 15. There are 6 reservoirs and 1 fence in the WSA. There is 1 pipeline on the boundary of the WSA. No new range improvements are planned. The reservoirs are within a mile of the WSA boundary. Maintenance of reservoirs would be conducted by the permittee approximately every 20 years. Where practical alternatives are not available, the occasional use of motorized equipment could be permitted on a case-by-case basis following an environmental analysis.



Map DP-1
DEVILS PLAYGROUND-TWIN BUTTES WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



-  Wilderness Study Area Boundary
-  Public Land (Administered by BLM)
-  Private Land
-  State Land
-  Federal Minerals



Map DP-2
LAND AND MINERAL STATUS
Devils Playground-Twin Buttes WSA

DEVILS PLAYGROUND - TWIN BUTTES WSA

Wildlife Habitat Management

No actions associated with wildlife management are anticipated in the WSA. Because no development activities would take place, wildlife habitat would be maintained.

No Wilderness (No Action)

None of the 23,841-acre Devils Playground-Twin Buttes WSA would be designated as wilderness. No oil and gas exploration or production is anticipated. Therefore, no new roads are expected. Motorized vehicles would be limited to the 23 seismic and 2-track trails.

Mineral Resources

Oil and Gas Exploration and Development

Oil and gas leasing would resume in the WSA. The 22,561 acres of Federal mineral estate in the WSA would be offered for lease. There would be no seasonal stipulations to protect wildlife. Stipulations restricting operations on steep slopes would be placed on oil and gas leases in the WSA.

Oil and gas exploration is not anticipated because the potential for oil and gas production is low. This assumption is based on the success ratio of nearby wells. Twelve dry holes have been drilled within 6 miles of the WSA. There are no known recoverable oil and gas resources. No new roads would be constructed.

Solid Mineral Exploration and Development

No activity related to salable, locatable, or leaseable minerals is anticipated. Although coal, oil shale, uranium, and gold may be present, their development potential is low. The development potential for trona is considered to be moderate; however, due to the thinner, deeper beds of mixed sodium and halite (salt), development is unlikely in the foreseeable future. There are also better sources of these minerals nearby.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would continue to be limited to the 23 seismic and 2-track trails (43 miles of trails). No new roads would be constructed. Off-highway vehicle use would remain at current levels of approximately 50 visitor use days annually).

Recreation Use

Hunting would be allowed but motorized vehicles would be limited to existing trails. No developments associated with recreation are anticipated. The existing recreation uses in the WSA would remain the same (25 hunter-days annually for antelope and mule deer). Currently, all the hunters who use the WSA, use motorized vehicles on existing trails for at least part of their visit. There would be approximately 25 visitor-days annually of non-hunting recreation (virtually all rockhounding).

Grazing Use

Grazing management practices (Henry's Fork grazing allotment) would not change from those currently in place. Within the Devils Playground-Twin Buttes WSA, the estimated carrying capacity of 1,420 AUMs for cattle and 168 AUMs for sheep would continue from May 1 to December 15. There are 6 reservoirs and 1 fence in the WSA. There is 1 pipeline on the boundary of the WSA. Each reservoir would be maintained approximately every 20 years. No additional range improvements are planned. The use of motorized vehicles in connection with range management activities would be allowed (2 to 4 trips annually on existing trails to check on livestock).

Wildlife Habitat Management

No actions associated with wildlife management are planned. No seasonal stipulations would be included in oil and gas leases to protect crucial habitat because the WSA does not provide crucial habitat for any species of wildlife.

CHAPTER II - Affected Environment

Introduction

The area receives limited use, mostly from livestock grazing and hunting. It receives negligible use for camping and other activities. The WSA contains a substantial amount of fossils, tiger chert, and cultural resources. Use of the area is limited by the lack of potable water sources. There are no ACECs in the Devils Playground - Twin Buttes WSA.

DEVILS PLAYGROUND - TWIN BUTTES WSA

Wilderness Values

The Devils Playground - Twin Buttes WSA contains 23,841 acres, including 1,715 acres of split estate. The Devils Playground - Twin Buttes WSA meets the criteria established in Section 2(c) of the Wilderness Act of 1964.

Naturalness

The Devils Playground - Twin Buttes WSA is essentially natural in character. It contains large areas of badland topography, as well as deeply incised canyons heavily vegetated with large 300- to 400-year-old junipers.

There are 23 seismic and 2-track trails, 17 reservoirs, and 2 fences. The seismic trails and 2-track trails are mostly very faint to obscure and are substantially unnoticeable. These trails snake through both the badlands and the deep canyons in a way that makes them unnoticeable for all but very short lengths. Most of the trails receive very little apparent use. These intrusions do not detract from the overall natural character of the WSA which is associated primarily with the unique geologic features of the area.

Solitude

The diverse topography and size of the WSA combine to screen and disperse use, and provide ample opportunities to experience solitude.

Primitive and Unconfined Recreation

The WSA contains many trails that are accessible to motorized vehicles. This reduces the opportunities for primitive and unconfined recreation.

Special Features

The WSA has interesting and unusual geologic features. Fossil deposits and evidence of early humans can be found throughout the WSA. The Pine Springs archeological campsite (sections 19 and 30, T. 14 N., R. 109 W.), on the western boundary of the WSA, is a small concentrated site. It contains stratified remains of several prehistoric cultures, the oldest of which has been dated to 9,000 years ago. The Pine Springs site is considered extremely significant and is eligible for the National Register of Historic Places; but was not nominated. The Pine Springs site was withdrawn from surface entry and mining

in June 1987 for a period of 20 years unless a subsequent review determines that the withdrawal should be extended.

A large number of stone circle or tipi ring sites are located within the WSA. These sites are believed to date to the Late Archaic and Late Prehistoric Periods (2,500 and 1,500 years ago, respectively) although some may be Protohistoric. Tipi ring sites are unusual in southwest Wyoming and are considered significant cultural resources. None of the tipi ring sites have been evaluated for the National Register of Historic Places, but some or all could be eligible.

The WSA contains large amounts of chert, which was used by these earlier cultures to make arrowheads and other tools.

Mineral Resources

Exploration and geologic projections in the immediate area show no known recoverable reserves near the Devils Playground - Twin Buttes WSA. Therefore, the most probable recoverable reserves has been assigned a value of zero.

There are no oil or gas wells in the WSA. Twelve dry holes have been drilled within a 6-mile radius of the WSA. Curren Creek Federal #1 well (SW $\frac{1}{4}$ SW $\frac{1}{4}$ of section 20, T. 14 N., R. 108 W.) was drilled to a depth of 19,248 feet in April 1976. It tested the Frontier Formation at a depth in excess of 16,000 feet with maximum flow rates of 500,000 cubic feet of gas per day. This well was abandoned as sub-economic. It was re-entered to test shallower formations, which also proved sub-economic.

The WSA is under an oil shale withdrawal (Executive Order 5327, May 20, 1930; and Public Land Order 4522-1967) and is segregated from mining to protect the oil shale deposits. The WSA has low development potential for oil shale. The deposits are low in grade, thin bedded, and deep, and are currently of little commercial interest.

Uranium, phosphates, coal, and clinoptilolites are also known to occur in the WSA, but they have low development potential. The WSA is within the Green River-Hams Fork Coal Region. The coal is found in thin, discontinuous, lignite beds and its development potential is low.

The potential for sodium (trona) development was recognized by the delineation of the Green River Basin Known Sodium Leasing Area (KSLA). The WSA is almost entirely (95 percent) within the KSLA and is considered to have moderate development potential. However, the WSA portion of the KSLA has thinner, deeper beds of mixed sodium and halite (salt) deposits. Development is unlikely in the foreseeable future. Other sources of trona are currently

DEVILS PLAYGROUND - TWIN BUTTES WSA

being mined nearby. BLM and industry projections indicate that existing sodium reserves currently under lease can meet market demands.

The outcrops of the Bishop Conglomerate in the WSA are of sufficient quality to be used as highway construction material. The sand and gravel reserve, although substantial, has low development potential because it is found on mesa tops with steep surrounding topography and is inaccessible.

Wildlife

The Devils Playground - Twin Buttes WSA provides a variety of wildlife habitat. The habitat types in the WSA include badlands, sagebrush steppe, and juniper. There is a variety of animal life including big game, song birds, small mammals, raptors, and sage grouse. Of the major big game species, only mule deer and pronghorn antelope are found within the WSA. The area provides yearlong deer and antelope range. The WSA does not provide habitat for elk or moose.

The Devils Playground - Twin Buttes WSA (23,841 acres) constitutes 2.8 percent of the 842,195-acre Cedar Mountain mule deer hunt area; and 2.7 percent of the 864,391-acre Cedar Mountain pronghorn antelope hunt area.

A 1986 survey demonstrated the occurrence of prairie dogs in the WSA. Bald eagles have not been demonstrated to occur in the WSA. There is no suitable habitat for peregrine falcon, whooping crane, humpback chub, or Colorado squawfish.

Recreation Opportunities

Present recreation use of the WSA is limited. Antelope hunters use the lower elevations. Deer hunters use the higher elevations covered with juniper.

Approximately 25 hunter-days are spent in the WSA annually for mule deer and antelope. Most off-highway vehicle use on the existing trails in the WSA is hunting related. Rockhounding occurs on an infrequent basis, and a very small amount of overnight camping occasionally occurs. Recreation use, other than hunting, accounts for less than 50 visitor-days annually.

The Flaming Gorge National Recreation Area (NRA), which draws thousands of visitors every year, is 1 mile east of the WSA. The Ashley National Forest manages the NRA for regional recreation use, boating, camping, fishing, waterskiing, and other water sports. The WSA is accessible from both the

east side (where Flaming Gorge NRA is located) and the west side (where Pine Springs is located). The larger number of people who use the Flaming Gorge NRA enhances the opportunities to expand visitor use in the WSA for such day use activities as hiking and sightseeing.

There are occasional unauthorized uses in the WSA associated with people going into the WSA to hunt for arrowheads. This use may equal or be greater than the 50 visitor-days annually for recreation other than hunting.

Estimates of use for the hunt areas in which the Devils Playground - Twin Buttes WSA is located include 1,444 hunter-days in the 864,391-acre Cedar Mountain mule deer hunt area; and 964 hunter-days in the 842,195-acre Cedar Mountain pronghorn antelope hunt area.

Livestock Grazing

Grazing use of the WSA is primarily for summer cattle and winter sheep. The estimated carrying capacity in the WSA is 1,420 AUMs for cattle and 168 AUMs for sheep (from May 1 to December 15). Sheep also use the Flaming Gorge area to the east, where the grazing is managed by BLM under a Memorandum of Understanding with the Ashley National Forest. When sheep are in the WSA, they also depend on snow for water because the reservoirs are frozen. The Forest Service is considering construction of a fence to the east of the WSA which would reduce sheep use of the Flaming Gorge area. This may result in higher utilization of the area within the WSA.

Water Resources

The Devils Playground - Twin Buttes WSA can be characterized by high magnitude, low frequency flows which move a great deal of naturally occurring sediments. This is due to the naturally high erosion rate in the area. The only sizeable spring in the area is Pine Spring which will be sampled every 5 years. Water collects in pockets after a rainstorm and remains there for several days where it is used by livestock. The canyons more heavily vegetated with junipers do not generate a great deal of erosion. The heaviest natural erosion and sedimentation originates in the badland topography after a heavy rainstorm when water rushes from the higher unvegetated slopes associated with exposed Bridger Formation, through the many drainages in the badlands.

DEVILS PLAYGROUND - TWIN BUTTES WSA

The WSA is dominated by soils less than 20 inches deep to bedrock on slopes of 10 to 100 percent. Common soil textures are sandy loam, loam, and very channery loam. Because of the steepness of slopes and sparse vegetation cover, these soils are highly erodible as is indicated by the dissected nature of the landscape. Rock outcrops of shale and sandstone are a major component of the landscape.

Because of the shallowness of the soils and the steep slopes, these soils are susceptible to severe erosion on disturbed areas. Any road building would have to be subject to stringent preventive measures to alleviate the innate erodibility of most of these soils. Reclamation is a challenge, in part because there is minimal growth medium for vegetation in the badlands. Dams require continual maintenance either because of failure due to heavy runoff or due to sedimentation from the eroding slopes.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of environmental consequences for the All Wilderness (Proposed Action) and No Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-12 summarizes the impacts by alternative.

TABLE 2-12
SUMMARY OF IMPACTS DEVILS PLAYGROUND WSA

	Proposed Action (All Wilderness)	Alternative A (No Wilderness)
Public Lands Designated	23,841 acres	0 acres
Other Lands	1,280 acres of split estate included in area recommended.	1,280 acres of split estate.
Area of Critical Environmental Concern (ACEC)	None	None
Wilderness Values		
Naturalness	Naturalness protected in the entire WSA.	Naturalness preserved in the entire WSA because uses are not expected to change.
Solitude	Solitude protected in the entire WSA.	Solitude preserved in the entire WSA because uses are not expected to change.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation protected in the entire WSA.	Opportunities for primitive and unconfined recreation preserved in the entire WSA because uses are not expected to change.
Special Features	Special features protected in the entire WSA.	Special features protected in the entire WSA.
Minerals		
Oil and Gas	Projected recoverable reserves: zero. No oil and gas foregone.	Projected recoverable reserves: zero. No oil and gas recovered from the WSA.
Wells in WSA Not Designated	0	0

DEVILS PLAYGROUND - TWIN BUTTES WSA

TABLE 2-12 (Continued)
SUMMARY OF IMPACTS DEVILS PLAYGROUND WSA

	Proposed Action (All Wilderness)	Alternative A (No Wilderness)
Surface Disturbance in WSA Not Designated	0 acres	0 acres
Solid Minerals	No potential	No potential
Wildlife Habitat and Populations	No effects on wildlife, including big game.	No effects on wildlife, including big game.
Recreation Opportunities	Reduction of 12 hunter- days annually. Unauthorized use (arrowhead hunting) would be reduced by 20 percent.	No effects on recreation opportunities.

Proposed Impacts and Alternatives

Proposed Action - All Wilderness (23,841 acres designated)

All of the 23,841-acre Devils Playground-Twin Buttes WSA would be designated as wilderness. There would be no oil and gas leases issued and no surface disturbance associated with oil and gas development. Motorized vehicles would be prohibited in the WSA.

Impacts to Wilderness Values

Naturalness

Naturalness would be preserved in the entire WSA because oil and gas activities would not be allowed, the WSA would be closed to motorized vehicles, and the uses of the WSA would not change. Most of the trails which extend into the WSA could be blocked at points that could not be driven around. The existing trails have had less and less motorized vehicle use over the past 10 years and the trails have become partially revegetated. This natural reclamation process would continue most rapidly (within 10 years) through the more sandy areas and areas that are currently vegetated on both sides of the trail. There are approximately 30 miles of trail in these types of areas.

Occasional limited vehicle use in connection with range management activities would not result in existing trails becoming more visible. The requirement for approval of the use of motorized vehicles would help maintain wilderness values in the WSA. Currently this use is no more than 1 to 2 trips annually to check on livestock. The use of motorized vehicles to check on livestock is limited. Due to the lack of water and steep slopes, much of the area receives little livestock grazing.

Solitude

Solitude would be preserved in the entire WSA because oil and gas activities would not be allowed, the WSA would be closed to motorized vehicles, and the uses of the WSA would not change.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation would be preserved in the entire WSA because oil and gas activities would not be allowed, the WSA would be closed to motorized vehicles, and the uses of the WSA would not change.

Special Features

Wilderness designation would help to protect the special features of this WSA. The closure to motorized vehicles would make many of the tipi ring sites and stone tool chipping areas less accessible to many visitors. As a result, there would be less disturbance to potentially important cultural resource sites. The closure would improve BLM's ability to protect cultural resources.

DEVILS PLAYGROUND - TWIN BUTTES WSA

Conclusion

The area's wilderness values would be maintained in the entire 23,841-acre WSA because surface-disturbing activities and motor vehicles would be prohibited. Naturalness would be enhanced because 30 miles of existing trails would become less noticeable within 10 years. There would be reduced damage to cultural resource sites.

Impacts to Oil and Gas Exploration and Production

There would be no surface disturbance associated with mineral activities. Oil and gas development potential in the WSA is very low. Therefore, no oil and gas resources would be foregone.

Conclusion

There would be no production of oil and gas but no production would be foregone because the recoverable reserves in the WSA are estimated as zero.

Impacts to Wildlife Habitat

The area provides yearlong habitat for antelope and deer. However, since no additional surface disturbance is anticipated and no change is expected due to OHVs or recreation use, no effect on wildlife habitat is anticipated. Consequently, there would be no effect on wildlife populations. Hunting pressure would remain about the same, approximately 25 hunter-days annually.

Conclusion

There would be no impacts to wildlife habitat or populations because no additional surface disturbance or changes in use of the WSA are expected.

Impacts to Recreation Opportunities

Recreation motor vehicles would not be permitted in the WSA, thereby eliminating vehicle-dependent recreation use. Access into the WSA would be on horseback or on foot because motorized vehicles would be prohibited in the WSA. OHVs are already limited to existing roads and trails and this restriction is not expected to affect recreation use.

A reduction of 12 hunter-days would be expected. Hunters who would not use the WSA of the closure to motorized vehicles would hunt in the WSA from the boundary roads or in nearby areas. The reduction is not expected to be any greater because the

hunter use is for pronghorn antelope and mule deer. Hunters are more willing to pack a small antelope longer distances to their vehicle than if the animal were larger. However, the elimination of motorized vehicles is expected to discourage some hunters.

The current level of use of 50 visitor-days for other recreation activities such as hiking, horseback riding, etc., would continue. The closure of trails into the WSA would reduce the number of people entering the WSA for unauthorized uses (hunting arrowheads) by about 20 percent, but this use would continue. If the WSA were designated wilderness, this use would be heaviest around the boundary of the WSA.

Due to the proximity of the Flaming Gorge National Recreation Area, which receives a much higher level of use, no impact on recreation opportunities in the region is anticipated. There is an increasing emphasis by the Forest Service in making the Flaming Gorge NRA a destination resort. The designation of the Devils Playground - Twin Buttes WSA would enhance those opportunities. If use in the Flaming Gorge NRA is expanded, visitor use in the WSA for day use, nonmotorized recreation could increase to 300 to 500 visitor-days annually.

Conclusion

There would be a reduction of 12 hunter-days annually. Nonmotorized recreation would remain at current levels of 50 visitor-days annually. Unauthorized uses (arrowhead hunting) would be reduced by 20 percent (to 40 visitor-days annually).

Impacts to Livestock Grazing

Grazing use would continue at 1,420 AUMs for cattle and 168 AUMs for sheep from May 1 to December 15. There are 6 reservoirs and 1 fence in the WSA. No new range improvements are planned. Livestock management practices would not be affected. It is expected that new range improvements needed in the area could be built outside of the WSA to accomplish the needed range management objectives.

Conclusion

Grazing use would continue at 1,420 AUMs for cattle and 168 AUMs for sheep from May 1 to December 15. Current livestock management practices would not be affected.

Impacts on Water Quality Management

The WSA is an area of steep slopes, bluffs, and unstable soils. The area experiences a substantial

DEVILS PLAYGROUND - TWIN BUTTES WSA

amount of natural geologic erosion because of the steep slopes and unstable (erosive) soils. No projects to reduce this natural erosion are planned. The nature of the WSA would make it very difficult to design projects that would not silt in or get washed out. Natural erosion would remain at its current levels.

Conclusion

Natural erosion originating in the WSA would continue at its current level. Water quality would not be affected.

Unavoidable Adverse Impacts

There would be a reduction of 12 hunter-days of use annually due to the reduction of access in the WSA. There would be no other unavoidable adverse impacts.

Irreversible and Irrecoverable Commitments of Resources

There would be no irreversible or irretrievable commitments of resources.

Short-Term Uses versus Long-Term Productivity

There would be no short-term uses that would affect the long-term productivity of the WSA. The closure of trails and general reduction in access in the WSA would help to reduce unauthorized collection of lithic material and damage to other cultural resources (e.g., tipi rings). Current productivity of the WSA to provide livestock forage would be maintained.

No Wilderness (No Action)

The No Wilderness alternative is that none of the 23,841-acre Devils Playground-Twin Buttes WSA would be designated wilderness. Oil and gas leasing would resume in the entire 23,841-acre WSA. However, no oil and gas exploration or production is anticipated. Therefore, no surface disturbance associated with oil and gas activity is anticipated. Motorized vehicles would be limited to existing roads and trails.

Impacts to Wilderness Values

Naturalness

Naturalness would be preserved in the entire WSA because oil and gas activities are not expected to occur, and the uses of the WSA, including recreation uses, are not expected to change. The existing trails have had less and less motorized vehicle use over the past 10 years and the trails have become partially revegetated. This natural reclamation process would continue most rapidly (within 10 years) through the more sandy areas and areas that are currently vegetated on both sides of the trail. There are approximately 30 miles of trail in these types of areas.

Occasional limited vehicle use in connection with range management activities would not result in existing trails becoming more visible. The requirement for approval of the use of motorized vehicles would help maintain wilderness values in the WSA. Currently this use is no more than 1 to 2 trips annually to check on livestock. The use of motorized vehicles to check on livestock is limited. Due to the lack of water and steep slopes, much of the area receives little livestock grazing.

Solitude

Solitude would be preserved in the entire WSA because oil and gas activities are not expected to occur and uses of the WSA are not expected to change.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation would be preserved in the entire WSA because oil and gas activities would not be expected to occur and the uses of the WSA, including recreation uses, are not expected to change.

Special Features

The uses of the WSA are not expected to change; therefore, the impacts to special features of the WSA, including cultural resources, are expected to remain at current levels. Tipi rings would not be afforded any additional protection from unauthorized damage.

DEVILS PLAYGROUND - TWIN BUTTES WSA

Conclusion

Although the WSA would not be afforded statutory protection, most wilderness values would remain because no long-term disturbance is expected and the recreation use of the WSA is not expected to change.

Impacts to Oil and Gas Exploration and Production

There are no known recoverable reserves in the Devils Playground - Twin Buttes WSA. Twelve dry holes have been drilled within 6 miles of the WSA. The most probable recoverable reserves estimated for the WSA is zero. Therefore, no oil and gas production is expected from the WSA if it is not designated wilderness, and the area is again offered for lease.

Conclusion

No exploration for, or production of, oil and gas is anticipated from the WSA. However, the opportunity for oil and gas development would be maintained.

Impacts to Wildlife Habitat

The area provides yearlong habitat for antelope and deer. However, since no additional surface disturbance is anticipated and no change is expected due to OHVs or recreation use, no effect on wildlife habitat is anticipated. Consequently, there would be no effect on wildlife populations. Hunting pressure would remain about the same, approximately 25 hunter-days annually.

Conclusion

There would be no effect on wildlife habitat or populations because no change in use of the WSA is expected.

Impacts to Recreation Opportunities

Motorized vehicle use would remain limited to 43 miles of existing trails. This vehicle restriction would not cause any change in vehicle-dependent recreation uses (25 hunter-days annually and 25 visitor-days for rockhounding) because current users of the area generally stay on existing trails.

Other recreation uses such as hiking, horseback riding, and rockhounding are expected to remain at present low levels (approximately 25 visitor-days annually), primarily due to the limited water supplies available in the WSA. Thus, no impact is anticipated.

Due to the proximity of the Flaming Gorge National Recreation Area, which receives a much higher level of use, no impact on recreation opportunities in the region is anticipated.

Conclusion

There would be very little change in the uses of the WSA. The Flaming Gorge National Recreation Area, which is in the immediate vicinity of the WSA, receives a much higher level of recreation use in numbers of visitors.

Impacts to Livestock Grazing

There are 6 reservoirs and 1 fence in the WSA. These range improvements would be maintained. Grazing use would continue at present levels of 1,420 AUMs for cattle and 168 AUMs for sheep from May 1 to December 15.

Conclusion

Grazing use would continue at 1,420 AUMs for cattle and 168 AUMs for sheep from May 1 to December 15.

Impacts on Water Quality Management

The Devils Playground - Twin Buttes WSA is in an area with steep slopes, bluffs, and unstable soils. The area experiences a natural geologic erosion because of the steep slopes and unstable (erosive) soils. Currently, no projects to reduce this natural erosion are planned in the WSA. However, if the WSA is not designated, OHV use would result in a minor (5 percent) increase in erosion.

Conclusion

There would be approximately a 5 percent increase in erosion originating in the WSA as a result of motorized vehicle use in the WSA.



RED CREEK BADLANDS WSA

CHAPTER I - Proposed Action and Alternatives

Summary Description and Background

The Red Creek Badlands WSA is a highly scenic area, a fragile watershed, a valuable wildlife area, and a popular hunting area. The WSA is approximately 5 miles north of the Wyoming-Utah state line and 35 miles south of Rock Springs (Map RC-1). Vegetation varies from greasewood in the draws and sagebrush on the bench areas, to juniper on the upper slopes. The Red Creek Badlands WSA (8,660 acres) is almost entirely (8,500 acres of the 8,660-acre WSA) within the 59,532-acre Red Creek Area of Critical Environmental Concern (ACEC), which covers lands in both Utah and Wyoming. The Red Creek Badlands WSA (Map RC-2), includes 8,020 acres of public land (7,380 acres in the Red Creek ACEC) and 640 acres of State land and minerals (all of which are in the Red Creek ACEC).

Proposed Action and Alternatives

Two alternatives were analyzed: 1) none of the 8,020-acre Red Creek Badlands WSA would be wilderness (Proposed Action - No Wilderness - No Action); and 2) all of the 8,020-acre of the Red Creek Badlands WSA would be wilderness (All Wilderness).

In the absence of specific resource use proposals, professional experience was used to develop reasonable scenarios which describe the actions that would occur under each alternative.

Proposed Action (No Wilderness - No Action)

The Proposed Action is to designate none of the 8,020-acre Red Creek Badlands WSA as wilderness. No oil or gas activities are anticipated. Motorized vehicles would be limited to 2 old seismic lines, 2 two-track trails, and an abandoned road to an old well site.

Mineral Resources

Oil and Gas Exploration and Development

Federal mineral estate (8,020 acres) in the WSA would be offered for lease. No oil or gas exploration or production is anticipated. There are no known recoverable reserves. This assumption is based on success ratios of nearby wells. Unleased lands in the Red Creek ACEC (8,500 acres) would be leased with stipulations to protect water quality and reduce salinity and silt loads. Leases would include seasonal stipulations to protect deer and elk winter range and raptors. Oil and gas leases would include stipulations restricting surface occupancy on slopes greater than 25 percent.

Solid Mineral Exploration and Development

No activity related to locatable or leasable minerals is anticipated. Although coal and oil shale may be present, their development potential is low. The development potential for trona is moderate. Due to the thinner, deeper beds of mixed sodium and halite (salt), development is unlikely for the foreseeable future. Better sources of these minerals are nearby.

Mineral extraction for salables would be allowed subject to applicable surface protection and rehabilitation requirements to protect other resources. However, no activity is anticipated.

Off-Highway Vehicle Use (OHV)

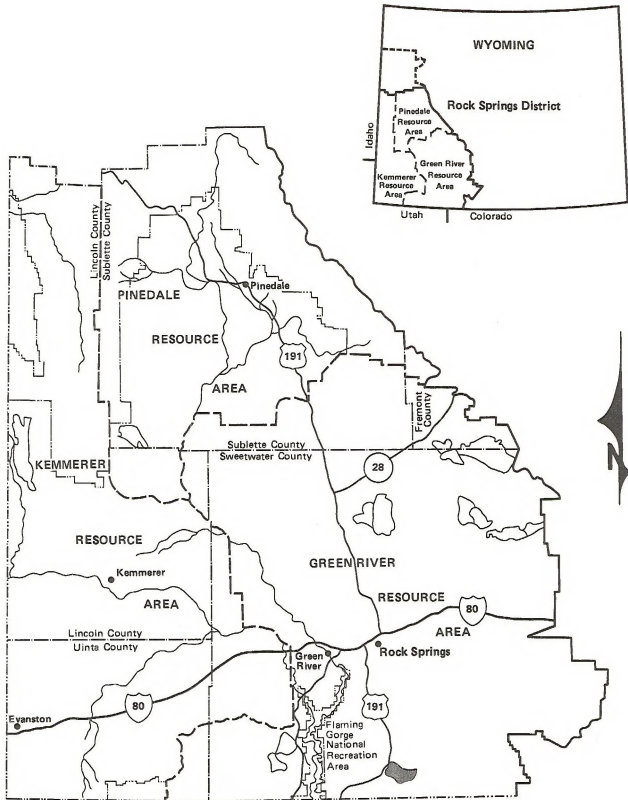
Off-highway vehicles (OHVs) would be limited to existing roads and trails. No new roads would be constructed.

Recreation Use

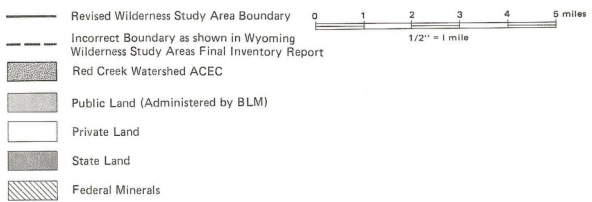
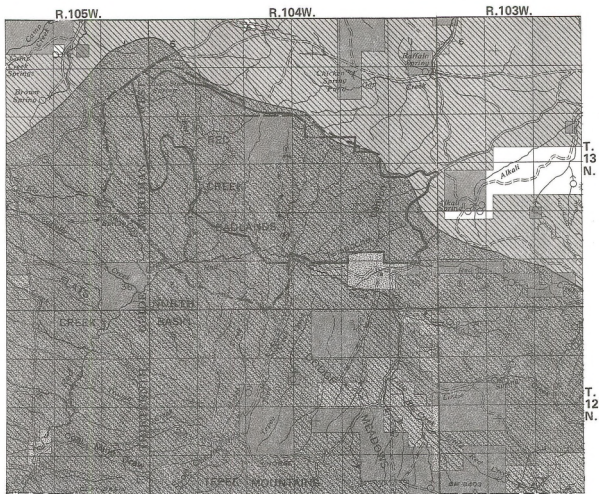
Hunting would be allowed but motorized vehicles would be limited to existing roads and trails. No developments associated with recreation are anticipated. Existing recreation use would remain the same.

Grazing Use

Grazing management (Red Creek grazing allotment) would not change. Within the Red Creek Badlands WSA, the estimated carrying capacity of 796 AUJs for cattle would continue from May 1 to



Map RC-1
RED CREEK BADLANDS WSA
 Rock Springs District
 Wilderness Environmental Impact Statement



Map RC-2
LAND AND MINERAL STATUS
 Red Creek Badlands WSA

RED CREEK BADLANDS WSA

November 1. There is 1 enclosure in the WSA. Beef Steer Spring, which provides livestock water, is not improved. No new range improvements are planned. The use of motorized vehicles in connection with range management activities would be allowed. This use would be infrequent and would be associated with permittees going into the area to check on livestock (1 to 2 trips annually).

Wildlife Habitat Management

No actions associated with wildlife management are anticipated in the WSA. However, opportunities exist to develop erosion and sedimentation control projects which would reduce downstream sedimentation and salinity. Because no development activities are anticipated, wildlife habitat would be maintained.

All Wilderness (8,020 acres designated)

All of the 8,020-acre Red Creek Badlands WSA would be designated as wilderness. There would be no oil and gas leases issued in the WSA and no surface disturbance associated with oil and gas activities. Motorized vehicles would be prohibited in the WSA, except for emergency purposes and limited use in connection with grazing management purposes. There are 640 acres of State land and minerals in the WSA.

Mineral Resources

Oil and Gas Exploration and Development

Oil and gas leasing would not resume in the WSA. Unleased lands in the 8,020-acre WSA would not be offered for lease. No exploration or development is anticipated. There are no pre-FLPMA leases in the WSA. Therefore, management would not be affected by this type of valid existing right.

Solid Mineral Exploration and Development

No activity related to salable minerals would be allowed. The WSA would be closed to mineral location and leasing.

Off-Highway Vehicle Use (OHV)

Motorized vehicles would not be allowed in the WSA, except for emergency purposes and limited use in connection with grazing management purposes.

Recreation Use

Management would be the same as under the Proposed Action except that hunters would not be allowed to use motorized vehicles in the WSA.

Grazing Use

Grazing management (Red Creek grazing allotment) would not change. The estimated carrying capacity of 796 AUMs for cattle would continue from May 1 to November 1. There is 1 enclosure in the WSA. Beef Steer Spring, which provides livestock water, is not improved. No new range improvements are planned. If range improvements are needed, they would have to meet non-impairment criteria for wilderness.

Wildlife Habitat Management

No actions associated with wildlife management are anticipated in the WSA. No development activity would be allowed. Therefore, wildlife habitat would be maintained.

CHAPTER II - Affected Environment

Introduction

The Red Creek WSA receives limited use, mostly from livestock grazing and hunting. It also receives negligible use for camping and other activities. In the WSA, 7,380 acres of public lands are also in the 59,532-acre Red Creek ACEC. The WSA contains 14 percent of the Red Creek ACEC in Wyoming. The ACEC will be managed for improvement of water quality through reduction of salinity and silt loads, and secondarily for wildlife values. Red Creek Basin and Scott Canyon (south of the WSA) would benefit by aggressive management to control erosion and sedimentation under ACEC management. Under current management, riparian areas are recovering.

Wilderness Values

The 8,660-acre Red Creek Badlands WSA is comprised of 8,020 acres of public land and 640 acres of State land. The WSA meets the criteria established in Section 2(c) of the Wilderness Act of 1964.

RED CREEK BADLANDS WSA

Naturalness

The WSA is essentially natural in character. Close inspection reveals 2 old seismic lines, 2 two-track trails, and an abandoned road to an old well site. These intrusions are faded and are no longer substantially noticeable.

Solitude

The rugged terrain and vegetative screening of the badlands provides numerous opportunities for solitude. When these 2 features are combined, a sense of remoteness and isolation is evident.

Primitive and Unconfined Recreation

Primitive recreation opportunities include hunting, hiking, and horseback riding.

Special Features

The red coloration of the rocks and cliffs, mixed with the various shades of vegetation, provides an interesting landscape. The WSA also contains pinyon pine stands which are a rare occurrence this far north. Tipi rings have been found along some of the mountain mahogany and juniper ridge tops. Occasional artifacts, evidence of early humans, have been found in the WSA.

Mineral Resources

Exploration and geologic projections in the immediate area show no known recoverable reserves at the location of the Red Creek Badlands WSA. The most probable recoverable reserves in the WSA has been estimated as zero.

There are 9 dry holes within a 3-mile radius of the Red Creek Badlands WSA, 2 of which are within the WSA. Both of these wells were drilled in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of section 15, T. 13 N., R. 104 W., to a depth of approximately 6,500 feet and tested the Mesaverde Formation with an uneconomic show of gas. The Weber Formation, at an approximate depth of 14,000 feet, was tested as uneconomic to produce (to the northeast and southwest of the WSA).

The Red Creek Badlands WSA is underlain by coal of unknown extent. Most of the WSA is within a coal land withdrawal established by Executive Order on

July 13, 1910. This and other withdrawals that may no longer serve a public purpose are under review by BLM for revocation. Carbonaceous shale and lenticular beds of subbituminous coal are common in the upper 3,000 feet of the Wasatch Formation (Bradley 1964). In a few places, these coal beds have been mined for domestic use, but commercial coal development in the WSA is considered to have low potential.

Part of the WSA is within an oil shale withdrawal (Executive Order 5327 and Public Land Order 4522) which closes the area to mining claim location. This withdrawal is also under review by BLM for revocation. Oil shale development in the WSA is considered to have low potential.

There are no indications of other mineral values or public interest in other mineral values within the WSA.

Wildlife

The Red Creek Badlands WSA is crucial winter range for mule deer. The WSA provides pronghorn antelope and deer habitat in the spring, summer, and fall. Elk are year-round residents of the WSA. Small groups of elk can be found in scattered, more remote pockets of juniper and related vegetation. Pronghorn antelope are the dominant big game species in the lower elevations, with mule deer becoming more prevalent in the juniper badlands and steeper canyons.

The 8,020-acre Red Creek Badlands WSA constitutes 3.3 percent of the 261,988-acre Pine Mountain elk hunt area; 3.5 percent of the 250,058-acre Pine Mountain mule deer hunt area; and 1.1 percent of the 772,012-acre Pine Mountain pronghorn antelope hunt area.

Other species present include the coyote, bobcat, golden eagle, red-tailed hawk, and numerous species of small animals. There are no known threatened or endangered species in the WSA.

Habitat types in the WSA include juniper, badlands, cliffs, buttes, outcrops, and mountain shrub and sagebrush steppe mixed with juniper. Some meadows are also found in the sagebrush steppe habitat. The predominant habitat type is a combination of the sagebrush steppe and juniper.

A 1978 survey revealed no prairie dog towns. Two raptor surveys were conducted, in 1978 and 1984. No bald eagles were demonstrated to occur in the WSA. There is no suitable habitat for the peregrine falcon, whooping crane, Colorado squawfish, or humpback chub.

Recreation Opportunities

Recreation use in the WSA includes hiking, horse-back riding, rockhounding, wildlife observation, and hunting. The steep topography, unstable soils, and the lack of potable water limit recreation activities. The primary recreation activity in the WSA is hunting. Most off-highway vehicle use occurs in conjunction with hunting.

Estimates of use for the hunt areas in which the Red Creek Badlands WSA (8,660 acres) is located include 277 hunter-days in the 261,988-acre Pine Mountain elk hunt area; 1,709 hunter-days in the 250,058-acre Pine Mountain mule deer hunt area; and 1,819 hunter-days in the 772,012-acre Pine Mountain pronghorn antelope hunt area. There are approximately 25 to 30 hunter-days for deer annually and an equivalent amount of antelope. Because of the high percentage of steep slopes (over 40 percent) in the WSA, hunters generally use motorized vehicles only around the boundary roads and walk into the WSA.

Less than 10 visitor days annually are spent in the WSA for nonhunting recreation.

Livestock Grazing

The WSA is in the Red Creek allotment and is used for cattle grazing (796 AUMs) from May 1 to November 1. Livestock use in the WSA is for summer cattle. There is 1 enclosure in the WSA.

Water Resources

The majority of the soils in the Red Creek WSA are less than 20 inches deep to bedrock and subject to severe erosion mainly due to steepness of slopes. These soils formed in residuum derived from sandstone and contribute much of the sediment to the Red Creek drainage. Steeper soils (10 to 60 percent slopes) occur below the north rim of the watershed and are intermingled with sandstone and shale outcrop of the Wasatch Formation. These soils are found in the Badlands area. West and north of Red Creek, shallow sandy loams dominate on slopes of 2 to 30 percent. Many of these soils have been severely dissected by geologic erosion.

The availability of water is generally good, especially in the spring when the cattle are first turned out. The WSA contains 1 perennial stream, Red Creek, and numerous intermittent streams. Red Creek flows into the Green River in Utah below

Flaming Gorge Reservoir. The major tributary to Red Creek in the WSA is Beef Steer Creek, an ephemeral stream. The WSA has highly erodible red shales and sandstones. The erodibility in the area is a major watershed concern. Natural sedimentation contributes sediment and salts to the Green River and eventually to the Colorado River system.

The Red Creek watershed is approximately 144 square miles, of which 109 square miles are in Wyoming. The WSA contains 14 percent of the Red Creek ACEC in Wyoming. Red Creek drains the southwestern flank of a geologic structure known as the Rock Springs uplift. The goal of the ACEC management plan for the Red Creek watershed is to reduce the amount of sediment delivered to the Green River as a result of sheet and rill erosion, gullying, and channel erosion. Some erosion is the result of previous disturbances. Current grazing management is resulting in a reduction of erosion and recovery of riparian areas.

A gauging station was installed in Red Creek. After 2 years, it was damaged and has not been reconstructed. The only other water quality data collected on Red Creek was during 1979 and 1980 on Little Red Creek, the upper reaches of Red Creek, and Richards Gap. If primitive recreation in the area increases, or if other activities increase which would result in a greater potential for increased erosion, Beef Steer Creek will be monitored.

There are range improvements, including water developments and enclosures, in the Wyoming portion of the ACEC south of the WSA. Opportunities exist, within the WSA, to implement erosion and sedimentation control structures which would reduce salinity in the Colorado River system.

CHAPTER III - Environmental Consequences

Introduction

This section contains an analysis of environmental consequences for the No Wilderness (Proposed Action) and All Wilderness alternatives. The actions are analyzed in terms of the resources determined, during scoping, to be issues. The relationship between short-term uses and long-term productivity, and any irreversible or irretrievable commitments of resources were considered and documented. Where appropriate, mitigation measures were made part of the proposals. Table 2-13 summarizes the impacts by alternative.

RED CREEK BADLANDS WSA

TABLE 2-13
SUMMARY OF IMPACTS RED CREEK BADLANDS WSA

	Proposed Action (No Wilderness)	Alternative A (All Wilderness)
Public Lands Designated	0 acres	8,020 acres
Other Lands	640 acres of State land in WSA.	640 acres of State land would be added, if acquired.
Area of Critical Environmental Concern (ACEC)	8,500 acres of the WSA are in the Red Creek ACEC.	8,500 acres of the WSA are in the Red Creek ACEC.
Wilderness Values		
Naturalness	Naturalness preserved because uses are not expected to change.	Naturalness protected in the entire WSA.
Solitude	Solitude preserved because uses are not expected to change.	Solitude protected in the entire WSA.
Primitive and Unconfined Recreation	Opportunities for primitive and unconfined recreation preserved because uses are not expected to change.	Opportunities for primitive and unconfined recreation protected in the entire WSA.
Special Features	Special features preserved because uses are not expected to change.	Special features protected in the entire WSA.
Minerals		
Oil and Gas	Most probable recoverable reserves: zero. No oil or gas recovered.	No oil and gas production foregone because projected recoverable reserves estimated at zero.
Wells in WSA Not Designated	0	0
Surface Disturbance in WSA Not Designated	0 acres	0 acres
Solid Minerals	No potential	No potential
Wildlife Habitat and Populations	No effect on wildlife, including big game.	No effect on wildlife, including big game.
Recreation Opportunities	No effect on recreation opportunities either in the WSA or in the region.	No effect on recreation opportunities either in the WSA or in the region.
Livestock Grazing	No effect on grazing use.	Occasional inconvenience to livestock operator because of restrictions on motorized vehicle use and nonimpairment criteria for new range improvements. No effects on livestock numbers.
Water Quality	Natural erosion would remain at current levels. Salinity contribution to the Colorado River system would remain the same.	Natural erosion and salinity may be reduced with ACEC management, improving downstream water quality.

Proposed Action and Alternatives

Proposed Action (No Wilderness - No Action)

The Proposed Action is to designate none of the 8,020-acre Red Creek Badlands WSA as wilderness. There would be no oil and gas exploration and development and no changes in recreation use are expected. Motorized vehicles would be limited to the 2 two-track trails. No new roads would be constructed to reach oil and gas well sites because no oil and gas exploration and development is anticipated.

Impacts to Wilderness Values

Naturalness

Although statutory protection would not be afforded the area, naturalness would remain largely intact because no disturbance associated with mineral activity is anticipated. The steep slopes and unstable soils in the WSA limit the engineering feasibility of constructing roads in most of the WSA. Hunters generally use boundary roads to access the WSA. They walk into the WSA from these roads because the steep slopes make motorized travel in the WSA difficult. Implementation of the Red Creek ACEC Management Plan would help to protect naturalness and the area's special features associated with the area's colorful geology.

The use of motorized vehicles in connection with range management activities would be occasional and would not affect wilderness values except for the short period of time when the activities are taking place (probably no more than a day or two). The use of motorized vehicles by livestock operators would take place in only a small part of the WSA where steep slopes do not exist. These activities would probably not be necessary every year. The occasional use would not result in existing trails becoming more visible.

Solitude

Solitude would remain largely intact because no disturbance associated with mineral activity is anticipated. However, solitude may be lost for short periods of time if the area receives recreation use involving OHVs. This use is expected to remain at its current low level. Overall, no significant losses in solitude would occur because there would be no mineral development and no change in recreation use.

The occasional use of motorized vehicles in connection with range management activities would have only an occasional impact on solitude (1 to 2 days annually). There are no range improvements to maintain and livestock operators would not travel throughout the WSA, therefore, any motorized vehicle use would have only limited short-term effects on solitude.

Primitive and Unconfined Recreation

Opportunities for primitive and unconfined recreation would be preserved because no oil and gas activities would take place, no roads would be built, and uses of the area by motorized vehicles would not increase.

Special Features

The area's special features associated with its colorful geology would be preserved because no development activities are anticipated in the Red Creek WSA.

Conclusion

Naturalness, solitude, primitive and unconfined recreation, and the area's special features would not be afforded statutory protection. Most of the wilderness values in the WSA would be preserved because no long-term disturbance is expected and recreation use of the WSA would not change.

Impacts to Oil and Gas Exploration and Production

While the WSA would be open to mineral activities, development potential is low. Therefore, exploration for oil and gas is not anticipated and no oil and gas production from the WSA is expected. No exploration is anticipated because the oil and gas potential in the WSA is low and because the restrictions on surface disturbing activities would make it economically infeasible to construct roads and drill pads in the WSA.

Conclusion

There would be no oil and gas production from the WSA. No exploration is anticipated because the development potential in the WSA is low.

Impacts to Wildlife Habitat

One of the key values to be protected, through implementation of the Red Creek Watershed ACEC

RED CREEK BADLANDS WSA

Management Plan, is wildlife habitat. Forage production would increase and riparian habitat would improve as a result of continuing current watershed management and reducing erosion and sedimentation. However, wildlife numbers would not increase. The reduction in erosion and sedimentation would result in improvements in downstream water quality and improved fishery habitat outside of the WSA.

Conclusion

Wildlife habitat would not be affected.

Impacts to Recreation Opportunities

Motorized vehicle use would continue to be limited to designated roads and trails. These restrictions are currently in place and would not affect recreation opportunities either in the WSA or in the region. Other limited recreation uses, such as hunting, hiking, horseback riding, rockhounding, and wildlife observation are expected to remain at current levels.

Conclusion

There would be no changes in use of the WSA or changes in recreation opportunities. The would continue to be 50 to 60 hunter-days spent annually in the WSA for hunting. There would continue to be less than 10 visitor-days annually of nonhunting recreation.

Impacts to Livestock Grazing

The WSA would continue to provide 796 AUMs annually for cattle (May 1 to November 1). Management of the WSA would follow the guidelines established in the Red Creek Watershed ACEC management plan. This management would not affect current grazing management practices or livestock numbers. No range improvements would be built.

Conclusion

The WSA would continue to provide 796 AUMs annually for cattle (May 1 to November 1). There would be no effect on livestock management practices.

Impacts to Water Quality Management

The Red Creek Badlands WSA is part of the larger Red Creek ACEC, on the border between Wyoming and Utah. The WSA contains steep slopes and unstable soils. It experiences a substantial amount of natural geologic erosion due largely to the erosive na-

ture of the soils. Currently, no projects to reduce this erosion are planned in the WSA, although some projects are planned elsewhere in the ACEC.

Surface-disturbing activities associated with mineral development are not anticipated. Livestock grazing and recreation use would remain at current levels and would not adversely affect water quality or quantity.

If the WSA is not designated, 1 or 2 projects could be implemented in the WSA to reduce natural erosion and salinity contributions to the Colorado River system. Until such projects are implemented, natural erosion and salinity contributions would remain at their current levels. If the WSA were not designated, BLM's ability to manage the natural erosion problem in the WSA would be enhanced.

Conclusion

BLM's ability to manage the natural nonpoint source erosion originating from the WSA would be enhanced because the implementation of erosion control projects would be made easier. No development activities would take place to adversely affect downstream water quality and downstream water quality would improve.

Unavoidable Adverse Impacts

There would be no unavoidable adverse impacts.

Irreversible and Irrecoverable Commitments of Resources

There would be no irreversible or irretrievable commitments of resources.

Short-Term Uses versus Long-Term Productivity

No changes in uses of the WSA would occur as a result of the Proposed Action and no short-term uses would reduce long-term productivity.

All Wilderness (8,020 acres designated)

All of the 8,020-acre Red Creek Badlands WSA would be designated as wilderness. There would be no oil and gas leases issued in the WSA and no oil and gas activities would occur. Motorized vehicles would be prohibited in the WSA, except for emergency purposes and limited use in connection with grazing management.

RED CREEK BADLANDS WSA

Impacts to Wilderness Values

Naturalness

The boundaries around most of the WSA are old seismic lines or abandoned roads which are indistinct. These old trails are only occasionally used by hunters to access the WSA. Because of the steep slopes in most of the WSA, hunters generally do not use motorized vehicles in the WSA. For this reason, and because no oil and gas activities or range improvements would occur, naturalness would be preserved in the entire WSA. The limited motorized vehicle use, in connection with range management activities would not result in existing trails becoming more visible.

Solitude

The area's solitude would be maintained within the WSA boundaries because of the lack of oil and gas activities and the closure to motorized vehicles.

Primitive and Unconfined Recreation

Opportunities for primitive recreation would be maintained within the WSA boundaries because of the lack of oil and gas activities and the closure to motorized vehicles.

Special Features

The area's naturalness, solitude, and opportunities for primitive recreation would be maintained within the WSA boundaries because of the lack of oil and gas activities and the closure to motorized vehicles.

Conclusion

The WSA's naturalness, solitude, opportunities for primitive recreation, and the WSA's special features would be maintained in the entire 8,020-acre WSA because no oil and gas activities would take place and the WSA would be closed to motorized vehicles.

Impacts to Oil and Gas Exploration and Production

There would be no oil and gas production from the WSA. However, because the oil and gas potential in the WSA is low, and because no exploration is anticipated even under nondesignation, no oil and gas resources would be foregone.

Conclusion

There would be no production of oil and gas; but, no production would be foregone because the oil and gas potential in the WSA is low.

Impacts to Wildlife Habitat

There would be no surface disturbance associated with mineral activities. Recreation use would not change. A few hunters would not use the WSA because of the closure to motorized vehicles. They are would hunt in nearby areas. Overall, the impacts to big game habitat and numbers would be similar to those under the Proposed Action. The activities that are most likely to affect wildlife populations or their habitat are not expected to change and impacts to wildlife are not expected.

Conclusion

Wildlife habitat would be preserved in the entire 8,020-acre WSA. Existing populations would be protected because no surface-disturbing activities would occur, motorized vehicles would be prohibited, and no changes in recreation use are anticipated.

Impacts to Recreation Opportunities

Motorized vehicle use would be prohibited in the WSA. This restriction could cause a slight inconvenience to vehicle-dependent hunting. However, because hunters do not typically venture far into the WSA using motorized vehicles, the inconvenience would not be likely to discourage hunters from using the area. Hunting would remain at the current level of 50 to 60 hunter-days annually.

Other recreation uses such as hiking, horseback riding, rockhounding, and wildlife observation, would be expected to remain at current low levels (less than 10 visitor-days annually). The designation of the WSA as wilderness would not increase the interest in, or use of, the area for recreation.

Conclusion

Hunting use in the WSA would remain at the current level of 50 to 60 hunter-days annually. Recreation use for nonhunting recreation would remain at less than 10 visitor days annually.

Impacts to Livestock Grazing

The WSA would continue to provide 796 AUMs annually for cattle (May 1 to November 1). Manage-

RED CREEK BADLANDS WSA

ment of the WSA would follow the guidelines established in the Red Creek Watershed ACEC management plan. This management would not affect current grazing management practices or livestock numbers. No range improvements would be built.

Wilderness management may create an occasional inconvenience to livestock operators if they are not allowed to use motorized vehicles to check on livestock (1 to 2 trips annually). However, currently livestock operators do not drive into the center of the WSA because of the steep slopes and lack of trails. Therefore, any inconvenience would be minimal.

Conclusion

The WSA would continue to provide 796 AUMs annually for cattle (May 1 to November 1). There would be no effect on livestock management practices.

Impacts to Water Quality Management

The Red Creek Badlands WSA is part of the larger Red Creek ACEC, on the border between Wyoming and Utah. The WSA contains steep slopes and un-

stable soils. It experiences a substantial amount of natural geologic erosion due largely to the erosive nature of the soils. Currently, no projects to reduce this erosion are planned in the WSA, although some projects are planned elsewhere in the ACEC.

Surface-disturbing activities associated with mineral development would not be allowed. Livestock grazing and recreation use would remain at current levels and would not adversely affect water quality or quantity.

If the WSA is designated, no projects would be implemented in the WSA to reduce natural erosion and salinity contributions to the Colorado River system. If the WSA were designated, BLM's ability to manage the natural erosion problem in the WSA would be restricted.

Conclusion

BLM's ability to manage the natural nonpoint source erosion originating from the WSA would be restricted because the implementation of erosion control projects would be made more difficult. No development activities would take place to adversely affect downstream water quality, and downstream water quality would remain the same.



PART 3 - CONSULTATION AND COORDINATION

EARLY COORDINATION

The Bureau of Land Management (BLM) met with the public to outline the wilderness inventory process in late 1978. In February 1979, BLM held open houses and public meetings in Big Piney, Kemmerer, Pinedale, and Rock Springs. Initial inventory decisions were proposed in February 1979, followed by a 90-day comment period. Decisions on units to be inventoried were issued in July 1979. The BLM held public meetings in Big Piney, Kemmerer, and Pinedale (October and November 1979). In April 1980, BLM published proposed inventory decisions in a newspaper supplement (BLM's Proposed Wilderness Study Areas - Wilderness Program in Wyoming) which identified units to be studied as WSAs and units dropped from further consideration.

Open houses in May 1980 were followed by public meetings in Rock Springs and Pinedale. The BLM published the decisions in a newspaper supplement in November 1980 (Wyoming Wilderness Study Areas). It summarized comments and announced an opportunity to protest decisions through December 15, 1980. In May 1981, BLM published *Wyoming Wilderness Study Areas, A Final Inventory Report*, which identified the WSAs to be examined during the study phase of the wilderness review process.

EARLY DRAFT EIS

There was concern that livestock grazing and oil and gas activity would be excluded from designated

wilderness areas. Wildlife values and off-highway vehicle (OHV) use were other concerns. Ranchers felt that small areas adjacent to the Bridger-Teton National Forest should be dropped because of existing uses and problems associated with managing the areas as wilderness. The Wyoming Recreation Commission opposed wilderness anywhere there were historic trails, or adjacent to National Forest System RARE II lands. The Governor expressed concern about State lands within and adjacent to WSAs.

A Notice of Intent to prepare an EIS was published in the *Federal Register* on August 27, 1981. On September 30, 1981, a public meeting was held in Rock Springs to identify issues. A letter was mailed to over 300 organizations and individuals. A Draft EIS was released in 1983. During public review of the Draft EIS, 565 comments were received. A public hearing was held in March 1983, in Rock Springs. Twenty-eight witnesses testified; 2 submitted written comments. All comments and testimony were considered and a Revised Draft EIS was released in November 1988.

LIST OF PREPARERS

This EIS was written by a core team with assistance from an interdisciplinary team. Table 3-1 lists the preparers of this EIS.

TABLE 3-1
LIST OF PREPARERS

Name	Assignment	College Education	Experience
Alan Stein	Team Leader	B.S. Biology, Delaware Valley College; M.S. Biology, West Virginia University	16 years, BLM, 2 years EPA
Bill McMahan	Assistant Team Leader	B.S. Wildlife Management, Colorado State University	25 years BLM
Angelina Pryich	Writer-Editor	B.S. Business Administration, University of Nebraska at Omaha	8 years BLM, 2 years U.S. Air Force
Harold Johnson	Technical Coordinator, Draft Wilderness Study Report Leader	B.S. Forest Recreation and Park Management, Southern Illinois University	8 years BLM, 10 years U.S. Fish and Wildlife Service
David Vesterby	Final Wilderness Study Report Leader	B.S. Forest Management, Colorado State University	11 years BLM, 12 years U.S. Forest Service, 6 years private industry

CONSULTATION AND COORDINATION

TABLE 3-1 (Continued)
LIST OF PREPARERS

Name	Assignment	College Education	Experience
Jeff Hunt	Fluid Minerals	B.S. Petroleum Engineering, University of Southwestern Louisiana	6 years BLM, 3 years industry
Bernard Weynand	Special Assistance (Wildlife)	B.S. Wildlife Science, Texas A&M University	13 years BLM, 1 year Arizona Game & Fish, 2 years Texas A&M University
Dean Stilwell	Special Assistance (Minerals)	B.S. & M.S. Geology, University of Nebraska	10 years BLM, 1 year industry, 2½ years University of Nebraska, 1 year Nebraska Geologic Survey
Jack Bogle	Special Assistance (Recreation)	B.S. Natural Resource Management, Humboldt State University	16 years BLM
Kim Fritz	Special Assistance (Range)	B.S. Natural Environmental Resources, Arizona State University	11 years BLM
Russell Storbo	Special Assistance (Recreation, Wilderness, VRM, ORV, Wild & Scenic Rivers)	B.S. Park and Recreation Management, California State University	12 years BLM, 2 years National Park Service
Bruce Baker	Special Assistance (Wildlife)	B.S. Biology, California State University; M.S. Wildlife Management, Humboldt State University; Ph.D. Wildlife Ecology, Texas A&M University	9 years BLM
Wayne Erickson	Wyoming State Office, Wilderness Coordination	B.S. Forest Recreation Management, Utah State University	24 years BLM
Edward McTaggart	Wyoming State Office, Environmental Coordination	B.S. Forest Recreation Management, Colorado State University	25 years BLM
Wyoming State Office	Map Preparation and Printing		

COMMENTS ON THE REVISED DRAFT EIS

The comment period on the Revised Draft EIS extended until February 10, 1989. Comments were received from 455 agencies (State, Federal, and local), organizations, businesses, and individuals. Three public hearings were held: Rock Springs (January 4, 1989), Lander (January 5, 1989), and Cokeville (January 12, 1989). The hearings were attended by approximately 130 people; 33 people testified.

Testimony at the Cokeville hearing was short and focused on the Raymond Mountain WSA. Attendees

wanted to discuss their concerns with BLM and have BLM answer questions, so the hearing was closed and a public meeting was held. No public meetings were held after the Rock Springs and Lander hearings but BLM staff were available to answer questions before and after the hearing.

Some people were concerned that BLM would consider only comments on the Revised Draft EIS in preparing the Final EIS. They felt their efforts on the 1983 Draft EIS were being ignored. Since comments on the 1983 Draft EIS resulted in changes to the analyses and recommendations, some comments were no longer pertinent. The BLM did not want to judge which comments were still applicable and which no longer applied. At each public hearing, the hearings

CONSULTATION AND COORDINATION

officer explained that if anyone wanted earlier comments to be considered, they need only inform BLM. Press releases were issued and radio interviews were conducted in Rock Springs and Riverton making the same point.

The Sierra Club sent a "Wilderness Alert" to their members requesting that they support the 5 WSAs recommended and that they encourage BLM to recommend all the acreage under study as suitable for wilderness designation. Many letters from Individuals commented that way.

Most comments were from those who supported wilderness designation for all 13 WSAs (74 percent) or from those who opposed designation of any additional areas in Wyoming (23 percent). Comments from individuals supporting wilderness designation came from individuals in 39 states. Most comments from individuals who opposed wilderness designation came from within Wyoming. Industry is opposed to wilderness designation. Environmental and wildlife groups support wilderness designation. Thirty-one comments were received after the close of the comment period. Most of these comments supported designation of all 13 WSAs but did not contain substantive comments. A few comments addressed WSAs substantively and site-specifically. A few comments did not take a position (3 percent).

All comments that would help to improve the analysis or correct errors were identified. The Response to Comments section under Consultation and Coordination addresses comments from letters which raised specific points. Other letters which raised similar points were not included because there were too many letters to reprint in the Final EIS. The following sections summarize major points raised in comment letters and hearing testimony.

GENERAL CONCERNS RAISED IN COMMENTS ON THE REVISED DRAFT EIS

Range Management

Comment: The EIS did not describe grazing management adequately and that it said grazing management would not change. Ranchers and environmental groups felt it may be appropriate to change management in the future but the EIS did not provide for such a change.

Response: The Final EIS was changed to describe more clearly grazing management. If future changes

in grazing management are needed, they would be addressed on a case-by-case basis, whether or not a WSA is designated.

Recreation Use

Comment: Some individuals felt the estimates of user-days for nonmotorized recreation were exaggerated. Some off-highway vehicle (OHV) enthusiasts felt the EIS did not adequately provide for OHV recreation use.

Response: The estimates for visitor-days were based on BLM's best estimates of the areas. While they are not precise counts, they are within 25 percent error. The use for nonmotorized recreation in each WSA is small compared to WSAs elsewhere (less than 500 visitor-days annually). If the estimates are off by 25 or even 50 percent, the effect in terms of actual numbers would be very small.

Oil and Gas Resources

Comment: There was concern that the potential oil and gas resources and economic benefits foregone if a WSA is designated wilderness were not adequately considered.

Response: Oil and gas potential for each WSA was described in the Revised Draft EIS. Most WSAs were mostly under lease when the 1983 Draft EIS was written. Little or no drilling took place. This low level of activity took place when drilling activity in other areas was relatively high. Since then, industry allowed most oil and gas leases in the WSAs to expire. While the EIS says oil and gas may be foregone if a WSA is designated, the relatively low level of interest in exploration indicates there would be relatively little drilling in the short term. If a WSA is designated, there would be a minor social and economic effect (due to the lost opportunity for exploration and the associated construction and drilling workers).

Revenues from oil and gas resources may be foregone, but the probability of an exploratory well leading to field development is relatively low. It is unlikely that any oil and gas discovered would lie wholly within the WSA. If a WSA is designated, the State would benefit from a discovery of an oil and gas reservoir that is partially outside the designated wilderness area. Of the 6 WSAs recommended, only the Sand Dunes WSA has a producing oil and gas field nearby. It is likely that no more wells would be drilled in the WSA under either wilderness or nonwilderness.

CONSULTATION AND COORDINATION

Estimates for the economic value of potential reserves were added to the Final EIS. They are based on an assumed value of \$1.30 per thousand cubic feet of gas and \$19 per barrel of oil.

To help keep potential social and economic impacts in perspective, it is important to point out that the acreage recommended as suitable for designation represents only 1.8 percent of the public land in the Rock Springs District (a somewhat lower percentage of the Federal mineral estate).

Red Desert

Comment: Some commenters were specifically concerned with the Red Desert area (Great Divide Basin). They encouraged preservation of the area and recommended that WSAs in the Red Desert be designated. Others were concerned that special management should be developed for the Red Desert area as a whole.

Response: The Red Desert is an area where special management may be appropriate. The Green River Resource Area (Rock Springs District) has started preparation of a Resource Management Plan (RMP). Management of the Red Desert was identified as a concern by the public in that RMP.

Off-Highway Vehicles (OHVs)

Comment: Some residents felt none of the areas should be designated because it would restrict their ability to use the areas. Others felt that OHV enthusiasts should not be allowed to use all the public lands, and that use of motorized vehicles in areas with wilderness values (especially solitude and naturalness) should be restricted. Another concern was with increased disturbance to vegetation and big game and increased erosion caused by some OHVs.

Response: OHV use is an appropriate use of the public lands but it is not appropriate everywhere. In some cases, as with wilderness, it is not compatible with other uses. It may not be appropriate where OHV use would result in increased erosion if the soils have substantial natural erosion problems that multiple use management actions are intended to control.

Wilderness versus Multiple Use

Comment: Some individuals felt that none of the WSAs should be designated. All the WSAs analyzed

should be managed as multiple use lands and that designating them as wilderness would be "locking them up" and "locking people out." They felt that wilderness is for a "special interest." Others felt wilderness designation is important in lower elevations as well as in currently designated higher elevations and that other lands (e.g., coal strip mines, oil production facilities, electric generating plants, and other uses) are approved for essentially single use by other interests, to the exclusion of the general public.

Response: Wilderness is an issue of concern to people all over the Nation and is an appropriate use on some public lands. The Final EIS recognizes that wilderness designation may exclude or adversely affect other uses and that multiple use management does not fully protect wilderness values.

LIST OF AGENCIES, ORGANIZATIONS, AND INDIVIDUALS FROM WHOM COMMENTS WERE REQUESTED

The government agencies listed below were sent copies of the Revised Draft EIS and were asked to provide comments. Those who provided comments are indicated with an asterisk (*). The lists of industry, organizations, and individuals are those who provided comments on the Revised Draft EIS. The numbers in parentheses is the number assigned to each comment as it was received.

Federal Government

Department of Agriculture
Forest Service
Soil Conservation Service (16)*
Department of the Air Force (3)*
Department of Energy

Department of the Interior
Bureau of Indian Affairs
Shoshone and Arapaho Tribes
Bureau of Mines (6)*
Bureau of Reclamation
Fish and Wildlife Service (9, 495)*
Geological Survey
Minerals Management Service
National Park Service (7)*

Environmental Protection Agency (14)*
Federal Highway Administration
U.S. Representative Dick Cheney
U.S. Senator Alan Simpson
U.S. Senator Malcolm Wallop

CONSULTATION AND COORDINATION

State Government

Governor of Wyoming (448)*
Archives, Museums and Historical Department (453)*
Department of Environmental Quality
Forestry Division (454)*
Game and Fish Department (449)*
Geological Survey of Wyoming (450)*
Occupational Information Program
Oil and Gas Conservation Commission
Public Service Commission (451)*
Recreation Commission
State Clearinghouse
State Economic Planning and Development
State Engineer (452)*
State Land Use Council
State Planning Coordinator
Travel Commission
Water Development Commission (455)*
State Representatives of Wyoming
State Senators of Wyoming
Chris Plant, State Legislator (285)*

Governor of Colorado

Utah Division of Wildlife Resources

Local Government

County Planning Offices
Fremont County Commissioners
Green River City Engineer
Lincoln County Commissioners
Lincoln County Conservation District
Lincoln County Recreation Commission
Lincoln-Uinta Association of Governments
Rock Springs City Engineer
Rock Springs City Planner
Sublette County Commissioners
Sublette County Planning Commission
Sweetwater County Commissioners
Sweetwater County Engineer
Teton County Commissioners
Uinta County Commissioners

Mayors of:

Afton, Big Piney, Burns, Cokeville, Diamondville, Evanston,
Fort Bridger, Granger, Green River, Hartville, Jackson, Kemmerer,
LaBarge, Lander, Lyman, Marblaton, Mountain View,
Opal, Pinedale, Rawlins, Riverside, Rock Springs, Superior,
Thayne, and Wamsutter

Organizations

Blue Ribbon Coalition (126)
Committee for Idaho's High Desert (204)
Defenders of Wildlife (287)
Fremont County Recreation Board (1)
Friends of Wild Wyoming Deserts (434)
One-Shot Antelope Club (58)
Oregon-California Trails Association (432)
Riverton Sno-Goers (1)
Rocky Mountain Federation of Mineralogical Societies, Inc. (325)
Sierra Club - Mojave Group (185)
Sierra Club - 13th Congressional District (430)
Sierra Club - Wyoming Chapter (64)
Sweetwater County Wildlife Society (420)
The Fund For Animals Inc. (334)
The Wilderness Society (418)
Wind River Multiple Use Advocates (25)

Wyoming Continental Divide Snowmobile Association (1)
Wyoming Farm Bureau (363)
Wyoming Heritage Society (470)
Wyoming State Snowmobile Association (462)
Wyoming Wildlife Federation (447)

Business and Industry

Amoco Production Company (446)
Celsius Energy Company (63, 443)
Commercial Leasing & Development, Inc. (360)
Exxon Company, U.S.A. (Midland) (331)
Exxon Company, U.S.A. (Denver) (367)
Gustin Appraisal (17)
Gustin Enterprises (18)
Marathon Oil Company (312)
Nuclear Minerals Exploration (8)
Petroleum Association of Wyoming (469)
Rocky Mountain Oil and Gas Association (304)
Scandinavian Design (427)
Spence, Moriarty & Schuster (361)
Sports Afield (153)
Sun Exploration and Production Company (282)
Texaco, Inc. (15)

Individuals

Robert L. Abell (336)
Mary F. Alexander (56)
Jim Allard (386)
William D. Anderson (249)
Sandra Anderson (137)
Tom & Virginia Angenent (272)
S. Appelhaus (44)
Gerry Appelhaus (53)
Joe Appelhaus (55)
Wade Appelhaus (45)
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Willard D. Aten (66)
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Linda Badalucco (231)
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Paul A. Barnhart (390)
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Joseph L. Boyle (341)
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Ted & Barbara Cadman (286)
Janet Calcaterra (394)
Dr. Franz J. Camenzind (67)
Marty Campbell (76)
Elizabeth Campbell (392)
Bertha Campbell (81)

CONSULTATION AND COORDINATION

Individuals (Continued)

- Bill Cantwell (210)
 Bill Chadwick (180)
 David T. Chagala (170)
 R. Bruce Chamberlin (113)
 Cindy Champoux (440)
 John M. Chaplick (365)
 Norene Chase (375)
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 Adele Clark (351)
 Mary Gates Cline (350)
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CONSULTATION AND COORDINATION

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- Edward Norvaisis (339)
Z. Helene Noyer (182)
Suzanne I. O'Keefe (348)
Terence O'Malley (98)
Monika Olsen (181)
Lois O. Ormond (299)
Christine Osborne (321)
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A. James Rosenthal (391)
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J. Christopher Roth (251)
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Klle E. Snider (211)
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V. Speetzen (152)
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Byron P. Spicci (99)
Rickey Bourne, Sr. (52)
Lee Stanfield (408)
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Janet Steinberg (116)
J.R. Stenberg (315)
Kathleen C. & William P. Stevens (374)
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Darra Douglas Stone (303)
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Gerald Stout (82, 458)
John de Strakosch (205)
D. Strong (288)
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Mike Sullivan (21)
Sean Sullivan (308)
Mr. & Mrs. Hans F. Summers (215)
Dr. Sandra K. Surbrugg (217)
Mr. & Mrs. William Svoboda (117)
John R. Swanson (320)
Craig Swanson (295)
Arnold Talentino (333)
Liz Tanke (268)
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Jeff Thieret (184)
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Al Trease (327)
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Jane Valerius (284)
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Alan J. Vick (343)
Joanne Vinton (256)
Kristin Vogel (172)
Gregory A. Voth (123)
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E. Michael Weber (97)
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Roslyn G. Westman (29)
Paul Westman (40)
Irene White (166)
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Lance Wilcox (436)
Hal & Cathy Williams (444)
Katherine S. Wilson (182)
Harry E. Wilson (107)
Richard Wilson (407)
Marjorie Woodruff (196)
John & Nancy Wooley (400)
C. Peter Wurr (355)
Michael Yakes (393)
Pete Yamagata (134)
Marianne Yancey (358)
Mike Young (73)
Dino Zamanis (356)
B. Beausoleil Zelwer (179)
Susan Zweiser (405)

CONSULTATION AND COORDINATION

LIST OF INDIVIDUALS AND ORGANIZATIONS WHO PROVIDED TESTIMONY AT THE PUBLIC HEARINGS

January 4, 1989 (Rock Springs)

Craig Thompson (Sweetwater County Wildlife Association)
James Magagna
Gerald Stout
Dick Randall (Defenders of Wildlife)
Ron Smith
Chris Plant (State Legislator)
Henry Yaka (Wyoming State Snowmobile Association)
Kim Brown
Al Trease
Patrick Mehle
Leonard Hay
Bill Taliaferro

January 5, 1989 (Lander)

Mike Massie
Wendy Frueauf (Petroleum Association of Wyoming)
Mary Paxson (Wyoming Heritage Society)
Gerald Stout
Ted Cadman
Dick Loper (Wyoming State Grazing Board)
Harold DeLyzier
David Neary
Carl Kottcamp
George Reynolds (Wind River Multiple Use Advocates)
Lynn Kinter (Friends of Wyoming Wild Deserts)
Stephanie Kessler
Patrick Hickerson
Jay McFarland
Tom Bell

January 12, 1989 (Cokeville)

John Telchert
Virgil Bailey
Sam Bannion
Dennis Nate
John Reed
Vern Bailey
Russell Thornock
Bruce Badell
Dave Weston
Roland Johns

RESPONSES TO COMMENT LETTERS

All comments that would help to improve the analysis or correct errors were identified. The letters reproduced address comments which raised specific points. Other letters which raised similar points were not reproduced because there were too many letters to reprint in the Final EIS. Some handwritten letters have been typed verbatim to improve readability or to save space. Numbers have been inserted on each letter to identify individual comments, and comments are correspondingly numbered.

Index to Comment Letters and Responses

Federal Government

- (3) Department of the Air Force
- (6) Bureau of Mines
- (7) National Park Service
- (9) U.S. Fish and Wildlife Service
- (14) U.S. Environmental Protection Agency
- (495) U.S. Fish and Wildlife Service

State of Wyoming

- (448) Office of the Governor
- (449) Game and Fish Department
- (450) Geological Survey
- (451) Public Service Commission
- (452) State Engineer's Office
- (453) Archives, Museums, and Historical Department
- (454) State Forestry Division
- (455) Water Development Commission
- (285) State Legislator

Organizations, Industry, and Individuals

- (8) Nuclear Minerals Exploration
- (11) Willard Meyer
- (15) Texaco USA
- (18) Gustin Enterprises
- (25) Wind River Multiple Use Advocates

CONSULTATION AND COORDINATION

Organizations, Industry, and Individuals (Continued)

- (59) One-Shot Antelope Club
(62) Gerald Stout
(63) Celsius Energy Company
(64) Wyoming Chapter Sierra Club
(66) Willard D. Aten
(67) Franz J. Camenzind
(90) Brian Suderman
(126) Blue Ribbon Coalition Inc.
(127) Tom Ribe
(139) Irene Knudsen
(194) James and Lynn Dunder
(277) Gall K. Gossett
(282) Sun Exploration and Production Company
(286) Ted and Barbara Cadman
(287) Defenders of Wildlife
(304) Rocky Mountain Oil and Gas Association


- (312) Marathon Oil Company
(326) Merle M. Kottcamp
(331) Exxon Company, U.S.A.
(363) Wyoming Farm Bureau
(367) Exxon Company U.S.A.
(416) The Wilderness Society
(420) Sweetwater County Wildlife Association
(432) Oregon-California Trails Association
(434) Friends of Wild Wyoming Deserts
(443) Celsius Energy Company
(446) Amoco Production Company
(447) Wyoming Wildlife Federation
(459) Defenders of Wildlife
(469) Petroleum Association of Wyoming
(470) Wyoming Heritage Society

Letters Received From Federal Government Agencies

3

Response to Letter 3

Thank you for your comment.

 **DEPARTMENT OF THE AIR FORCE**
OFFICE OF THE ASSISTANT SECRETARY FOR ENVIRONMENTAL AFFAIRS
1100 COMMERCIAL STREET
DALLAS, TEXAS 75202-0001

NOV -9 AM 10 00
RECEIVED
CHIEF OF STAFF WYOMING
07 NOV 1988

Mr. Hillary Oden, State Director
Bureau of Land Management
Wyoming State Office
P. O. Box 1828
Cheyenne, Wyoming 82003

Dear Mr. Oden:


This is in response to your request for comments on the Revised Draft Environmental Impact Statement submitted for the Rock Springs District WF.

We continue to support the overall BLM planning concept. While actual conflicts between Air Force flying routes and the proposed resource management plan do not exist at the present time, routes and airspace requirements of the military do change frequently. Mission requirements, fuel costs, and environmental constraints all act upon the decision to locate a military training activity. In particular, low altitude high speed flight, because of general aviation and population pressures, has been relegated to those areas least accessible and sparsely inhabited.

For this reason, it is requested that you give full consideration to the extent to which management decisions associated with this management plan might adversely affect or restrict use of low altitude airspace by the Air Force. If restrictions are placed upon these military overflights, the negative impact on training and readiness will force the Air Force to object to the plan.

We hope this information is useful in your planning process. We thank you for the documentation previously provided and look forward to continued communication with your office.

Sincerely,


Raymond Brustmayer
Community Planner

Copy to: HQ USAF/EEY
Alan Skala

NOV 08 1988	
SEARCHED	INDEXED
SERIALIZED	FILED
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United States Department of the Interior

BUREAU OF MINES

P. O. BOX 1908
WILLIAM D. SWENY FEDERAL CENTER
CANTON, COLORADO 80513

Intermountain Field Operations Center

November 22, 1988



Memorandum

To: Alan Stein, Rock Springs District, Bureau of Land Management,
P.O. Box 1885, Rock Springs, Wyoming 82901-1885

From: Chief, Intermountain Field Operations Center

Subject: Review of Revised Draft Environmental Impact Statement (EIS) for 13 Wilderness Study Areas (WSAs) in the Rock Springs District, Wyoming

Bureau of Mines personnel reviewed the subject EIS as requested. The document pertains to 13 Wilderness Study Areas (WSA) in the Rock Springs District. Only five of the WSAs have been studied by Bureau of Mines personnel, however. Specific comments concerning mineral resources in several WSAs follow:

1. Buffalo Hump WSA (p. 98) and Sand Dunes WSA (p. 73), sand should be noted as a resource, although it most likely is subeconomic. 1
2. According to the Wyoming Mines and Minerals Map (1978), Alkali Draw, Alkali Basin-East Sand Dunes, Red Lake, White Horse Creek, and Red Creek WSAs contain coal-bearing strata. We believe the possibility of coal existing at depth should be mentioned. The same reference also indicates that the Devils Playground-Twin Buttes WSA is within an area known to contain oil shale-bearing strata. 2
3. According to the Metallic and Industrial Minerals map of Wyoming (1983), sodium sulfate and sodium carbonate (NaSO₄ and Na₂CO₃) occur in west-central part of the Alkali Draw WSA. These minerals should be mentioned (p. 88). 3

Our comments are based on library information and personal communication with personnel who have studied the areas.

William Cochran
William Cochran

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NOV 25 1988

Responses to Letter 6

1. The analysis for the Sand Dunes and Buffalo Hump WSAs was changed to show sand as a resource.
2. The analysis for these WSAs was changed to reflect that they contain coal-bearing strata.
3. The analysis for the Alkali Draw WSA was changed to reflect that the west-central part of the WSA contains sodium sulfate and sodium carbonate.



United States Department of the Interior

NATIONAL PARK SERVICE

ROCKY MOUNTAIN REGIONAL OFFICE

1750 N. AVENUE, FORTWY

P.O. BOX 21287

DENVER, COLORADO 80221-0287



MEMORANDUM FOR:

L1219 (RMR-77)

NOV 22 1988

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Memorandum

To: Alan Stein, Rock Springs District, Bureau of Land Management, Rock Springs, Wyoming

From: Associate Regional Director, Planning and Resource Preservation, Rocky Mountain Region

Subject: Revised Draft Wilderness Environmental Impact Statement (EIS) (RMR-77)

Our comments on the subject revised Draft Environmental Impact Statement (EIS) are as follows:

The simplified range of alternatives (Proposed Action, No Action, and All Wilderness) clarified the issues and simplified our review. While we would have been more concerned with designation of all the Wilderness Study Areas (WSAs) described in the document, we recognize that there are economic concerns (well-expressed in the EIS) that BLM must take into account. The proposed action is representative of BLM's mandate for multiple use management, and the discussions regarding recommendations for each WSA are logically presented. Therefore, we generally support the proposed action, with one exception.

The Devil's Playground-Twin Buttes WSA is adjacent to the Fleming Gorge National Recreation Area. The EIS states (page 142) that "Due to the proximity of the Fleming Gorge National Recreation Area, which receives a much higher level of use, no impact on recreation opportunity in the region is anticipated." We believe that it is meant here is that Fleming Gorge divers whatever recreational use might be restricted to the region.

This is not necessarily the case. The very interesting geological and cultural resources of the Devil's Playground-Twin Buttes WSA would attract persons seeking a wilderness experience. It appears that the boundaries are sufficiently large so that the "... diverse topography and size of the WSA combine to attract and disperse use, and provide ample opportunities to experience solitude" (page 141).

We note that "if the WSA were designated wilderness, there would be no production of oil and gas but no production would be foregone because the recoverable resources in the WSA are estimated as zero" (page 142). Designation would also allow continued use of vehicles "... in connection with range management activities ..." (page 143). Indeed, except for prohibition of

Response to Letter 7

In the Final EIS, the recommendation for the Devils Playground - Twin Buttes WSA was changed to suitable because, upon review during interim management, many of the intrusions are healing and do not contribute to disturbances to naturalness.

recreational OHV use, there would appear to be no change in the existing use patterns. Therefore, we would support designation for this WSA or an area with varied and significant resources quite appropriate for wilderness.

We hope that the state and private lands recommended for inclusion in the proposed action (e.g. for the Buffalo Hump WSA) receive at least the protection accorded to BLM's study areas.

We note that OHV use would cease on the abandoned railroad line between the Sand Dunes WSA and Buffalo Hump WSA should wilderness designation be achieved for those areas. It might be well, at this preliminary stage, to investigate the possibilities of developing this ready-made access for superior hiking/horserback trail.

Thank you for the opportunity to review this well-thought-out DEIS.

Richard A. Streit

Richard A. Streit



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Fish and Wildlife Enforcement
212D Capitol Avenue, Room 7010
Cheyenne, Wyoming 82001

NOVEMBER 25, 1988
W-02 Rock Springs District (1) November 25, 1988

MEMORANDUM

To: District Manager, Rock Springs District, Bureau of Land Management, Rock Springs, WY
From: State Supervisor, Wyoming State Office, FWS/FWE, Cheyenne, WY
Subject: Revised Draft Rock Springs District Wilderness EIS (EC 88/80)

We have reviewed the subject draft environmental impact statement (DEIS) and have the following comments for your use in making wilderness/non-wilderness designations and in preparing the final EIS.

We found that water resource issues were discussed in only 3 of 13 Site-Specific Analyses (SSA). Pursuant to Executive Orders 11990 (wetlands) and 11988 (floodplains), potential impacts to wetlands and floodplain areas, especially in those Wilderness Study Areas (WSA) proposed for designation as non-wilderness, should be addressed and incorporated into the final EIS.

We also found the document insufficient regarding Endangered Species Act Section 7 responsibilities. On page 15, the DEIS states, "Several concerns were determined not to be issues because they would not affect or be affected by wilderness or non-wilderness management. These are ... and threatened and endangered species." On page 15 the following explanation is provided:

"Threatened and endangered species were not expected to be affected by the decision on wilderness designation. Wilderness designation would preserve wilderness values in an area. The habitat of threatened or endangered species would be preserved and protected from disturbance. When an area is not designated wilderness, BLM's permitting process for surface-disturbing activities would prevent adverse impacts to threatened and endangered species. Although some WSAs contain mining claims, activities associated with locatable minerals are not expected in any of the WSAs. Therefore, no adverse impacts to threatened and endangered species are expected."

There is no mention in the DEIS of which endangered or threatened species were considered, and how the determination of "no effect" was arrived at. We do not have any record of previous Section 7 consultation in our files. Although the subject DEIS does not address a "construction project", discussions with personnel in the BLM State Office indicated that biological assessments for endangered species are usually conducted when an EIS is being prepared.

We agree that designation of WSA's as wilderness should not affect listed species. However, we found no discussion on potential impacts and how those impacts could be avoided, for T/E species in WSA's designated non-wilderness.

Responses to Letter 9

1. Wetlands and floodplains are addressed in the site-specific analyses for each of the WSA. They are important in the Lake Mountain, Raymond Mountain, Buffalo Hump, and Sand Dunes WSAs.
2. Wildlife sections of Affected Environment for each WSA were modified to add information on threatened and endangered species for each WSA. See comment letter 495 from the U.S. Fish and Wildlife Service, expressing their no jeopardy opinion.

We found only minimal mentions of T/E species in 4 of the 13 SSA's, two of which are proposed for wilderness designation. The Raymond Mountain WSA SSA (proposed wilderness) discussed the bald eagle (*Haliaeetus leucophthalmus*), peregrine falcon (*Falco peregrinus*), and whooping crane (*Grus americana*) as listed species that may occur within or near the WSA. However, there was no discussion on how the "no effect" determination was arrived at. The Alkali Draw and Red Creek Badlands WSA SSA's stated, "The threat of endangered species have been identified," and "There are no known threatened or endangered species found in the WSA," respectively. Yet the reader is not told which listed species were considered. The Crown Butte WSA SSA (proposed wilderness) mentioned a historic peregrine nest site on the butte, but again, there was no further discussion on T/E species.

We don't know which T/E species were considered in this document. Were bald eagles and peregrine falcons addressed for each WSA? Were whooping cranes considered for both Raymond Mountain and Devils Playground-Twin Buttes WSA's? Were potential impacts to black-footed ferrets (*Mustela nigripes*) resulting from disturbance to prairie dog (*Cynomys sp.*) complexes considered? Will black-footed ferret surveys be required before disturbance is allowed in prairie dog complexes? The DEIS does not answer any of these questions.

We have no problem with the final EIS stating there is no impact to T/E species, provided sufficient information and/or evidence of consultation backs up that finding. However, the information presented in the DEIS does not provide sufficient information to arrive at that conclusion. We recommend that you complete informal Section 7 consultation with this office, and incorporate the results of that consultation in the final EIS. Please contact Richard Hill or myself at (725 325-2374) to pursue Section 7 consultation, or if we can be of further assistance.

R.G. Stealy

cc: MT/WY Field Office, FWS, Helena, MT
 ASD/PCE, FWS, Denver, CO
 State Director, BLM, Cheyenne, WY (Steve Roberts)
 Director, WYFD, Cheyenne, WY
 Nongame Coordinator, WYFD, Lander, WY

Take Pride in America

2

Response to Letter 14



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION VI
 898 18th STREET - SUITE 500
 DENVER, COLORADO 80202-2405

DEC 14 1988
 Re: BFM-EP

Alan Stein
 Rock Springs District
 Bureau of Land Management
 P.O. Box 1849
 Rock Springs, Wyoming 82902-1849
 Dear Mr. Stein:

In accordance with our responsibilities under the National Environment Policy Act (NEPA) and Section 309 of the Clean Air Act, the Region VIII office of the Environmental Protection Agency (EPA) has reviewed the Rock Springs District Revised Draft Environmental Impact Statement (RDEIS). We offer the following comments for your consideration in preparation of the final EIS.

We note that the RDEIS proposed action presents a significant increase in acreage for wilderness designation over the proposed action in your February, 1983 draft EIS (DEIS). We also appreciate BLM's response to EPA concerns, primarily clarification of pre-FLPMA oil and gas leases affecting the Wilderness Study Areas (WSAs), expressed in our review of the DEIS.

EPA's DEIS review also revealed a concern with potential salinity increases and resultant water-quality degradation related to continued grazing and recreation management practices in the Devil's Playground and Twin Buttes WSA's. Discussion of this concern in the RDEIS still is considered to be incomplete. We recommend the final EIS fully discuss monitoring plans and potential mitigation measures to meet this concern.

We consider the RDEIS to be a well written comprehensive document. A rating of 10 is recommended. This means that we have no objection to the proposed action, except as noted in our request for additional water quality considerations.

Sincerely,
Robert R. DePais
 Robert R. DePais, Chief
 Environmental Policy Branch
 Policy and Management Division

cc: Hillary A. Oden, Wyoming State Director
 William Dickerson, OPA A-104

1



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Fish and Wildlife Enhancement
2617 East Lincolnway, Suite A
Cheyenne, Wyoming 82001

WY/MS/SPR/10

W-32 Rock Springs District

December 28, 1989

MEMORANDUM

TO: District Manager, Rock Springs District, BLM, Rock Springs, WY
FROM: State Supervisor, Fish & Wildlife Enhancement, FWS, *T.G. Stacey*
Cheyenne, WY
SUBJECT: Revised Draft Rock Springs District Wilderness EIS

This responds to your August 18, 1989 memorandum which was received in this office on December 21, 1989 requesting our concurrence with your "no effect" determination on your wilderness/wilderness designations for 13 Wilderness Study Areas (WSA's) on the Rock Springs District in Wyoming.

Based upon the information provided in the subject assessment, we concur with your conclusion that a wilderness/no wilderness designation for the 13 WSA's is not likely to adversely affect the endangered bald eagle (*Haliaeetus leucocephalus*), peregrine falcon (*Falco peregrinus*), whooping crane (*Grus americana*), black-footed ferret (*Mustela nigripes*), Colorado squawfish (*Ptychocheilus lucialis*), or humpback chub (*Gila chub*).

Please understand that Wyoming project effects on Colorado squawfish and humpback chub are from depletions to the Green River System. These species do not occur in Wyoming. Mr. Bernard Weyring, your District Biologist, clarified to Richard Hill of my staff in a December 21, 1989 telecon, that the wilderness/no wilderness designation would not involve water depletions from the Green River System. WSAs that are not designated wilderness status will address future development impacts through the BLM permitting process and Section 7 of the Endangered Species Act on a case by case basis.

We appreciate your efforts to ensure the conservation of these endangered species as a part of our joint responsibilities under the Endangered Species Act, as amended. If you have any questions, contact me or Richard Hill, BLM staff at the letterhead address or (307) 772-2314/775 328-2374.

CC: Assistant Regional Director, FWS, Denver, CO (FW-61012D)
Field Supervisor, WY/FW, FWS, Helena, MT (FW-61125)
Director, WFD, Cheyenne, WY
Nongame Coordinator, WFD, Lander, WY

RLH/RSD/skc

495



Response to Letter 495

Thank you for your comment.

RECEIVED

ROCK SPRINGS

DEC 29 1989

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SO GRR
PRA

*Approved by
Stacey, DJ*



448

STATE OF WYOMING
OFFICE OF THE GOVERNOR
CYPRIENE BOGGS

MIKE SULLIVAN
GOVERNOR

February 21, 1989

Mr. Alan Stein
Rock Springs District
Bureau of Land Management
P.O. Box 1869
Rock Springs, WY 82902-1869

Dear Mr. Stein:

The Revised Draft Rock Springs District Wilderness Environmental Impact Statement, 1989, has been circulated for State agency review and comment. Copies of agency comments are enclosed for your consideration and use.

In general, it appears the BLM has addressed most relevant resource concerns for each study area in a thorough and straightforward manner. Please note, however, that agency comments raise a number of questions and request certain additional information, which should be provided in the Final Environmental Impact Statement.

With regard to the proposed non-wilderness designations, the rationale for releasing these areas to multiple use management appears sound. However, in regard to the areas recommended for wilderness designation, I intend to review these in the context of other Wyoming BLM wilderness area evaluations and will formulate a position when the BLM recommendations are completed statewide. When that time comes, in addition to considering the comments of Wyoming citizens and governmental entities, I will also be looking closely at how the BLM proposes to exchange State land and resources isolated by wilderness designation and at how BLM plans to address wilderness area water rights.

Thank you for the opportunity to review and comment on this plan. Please keep us informed of the progress in this effort.

With best regards, I am

Very truly yours,
Mike Sullivan
Mike Sullivan

MSires
Enclosures

Letters Received From the State of Wyoming

Response to Letter 448

In July 1988, the Attorney General concurred with the Department of the Interior Solicitor's opinion that Congress did not intend to reserve Federal water rights for wilderness purposes when it created the National Wilderness Preservation System. The issue is not an environmental issue that is appropriate for analysis in this EIS. It is essentially a legal matter, separate from the environmental review process. For these reasons, the issue was not analyzed in detail.

Game and Fish Department

January 27, 1989

BILL MOORE
DIRECTOR

EIS 2053.1
United States Department of
the Interior
Bureau of Land Management
Wyoming State Office
Federal Register
Notice of Availability
Revised Draft Environmental
Impact Statement (DEIS)
Rock Springs District
Wilderness Study Areas (WSA's)
Framont, Lincoln, Sablette,
Sweetwater and Dista Counties

Ed Miller
State Planning Coordinator's Office
Sawatch Building, 3rd Floor East
Cheyenne, WY 82002

Dear Mr. Miller:

The Wyoming Game and Fish Department has reviewed the revised draft environmental impact statement for the Rock Springs District Wilderness Study Areas. The Department has previously commented on most of these proposals, although adjustments in boundaries have been made and this update is appropriate. A copy of our previous comments are included for your review. We offer the following comments for your consideration.

Acoustic Concerns

As we noted in our April 4, 1983 comments, the only study areas containing fisheries are the Lake Mountain and Raymond Mountain Wilderness Study Areas (WSA's). The proposed action for the Rock Springs District Wilderness Study Areas is to designate Wilderness. Such a designation will provide the maximum protection possible for populations of Bear River cutthroat trout in Huff, Raymond and Coal Creeks.

Headquarters: 8400 Bishop Boulevard, Cheyenne, Wyoming 82002

Responses to Letter 449

1. Prescribed fire is not the only type of habitat improvement allowed in a wilderness area. Although wilderness designation would limit the options for habitat improvement projects, some projects (e.g., guzzlers, potholes) could be implemented if they do not violate the nonimpairment criteria and enhance the wilderness character or supplemental values of the area.
2. Management in the Red Creek Badlands Area of Critical Environmental Concern (ACEC) would be adequate to maintain the crucial winter range in the Red Creek Badlands WSA.
3. Nonwilderness management for the Alkali Basin-East Sand Dunes WSA would adequately protect big game habitat. The analysis indicates the WSA is not suitable for wilderness designation. Protection of big game habitat will be accomplished through other means (e.g., seasonal stipulations).
4. See response to Comment 3 of this letter.
5. Some of the information you provided was added to the analysis for the Raymond Mountain WSA.
6. The EIS points out that the Lake Mountain WSA is important to big game and to a sensitive trout species (Colorado River cutthroat trout). The ACEC management would provide adequate protection for this habitat. Prior to approving additional oil and gas activity, BLM would review proposals to determine if previous environmental analyses consider the potential environmental impacts, update the analyses with information from recent studies, and prepare necessary environmental documents. These efforts would be in consultation with the Wyoming Game and Fish Department. A study on the effects on big game due to the Exxon LaBarge Project (in this area) are not yet available. The study is expected to help address cumulative impacts in the area.

Mr. Ed Miller
January 27, 1989
Page 2 - EIS2053.1

Territorial Concerns

The wilderness study areas presented in the Draft EIS were evaluated based on the need for wildlife habitat protection and/or improvement. In many cases, protection from disturbance is an important factor in maintaining the ability of a given habitat to maintain animals. In other cases, active habitat improvements may be needed, but these kinds of activities are generally precluded under a wilderness designation.

Of the 13 Wilderness Study Areas (WSA), at least 6 contain crucial winter range for one or more big game species. These include Lake Mountain, Raymond Mountain, Sand Dunes, Alkali Draw, Red Lake, Bismarck Buttes, Oregon Buttes and Red Creek Badlands. Wilderness designation is the greatest protection which can be offered for crucial wildlife habitats within these Wilderness Study Areas and we therefore support this designation. We understand the Bureau of Land Management Wilderness Policy is being reviewed at the current time and prescribed fire can be utilized with certain constraints (nonimpairment criteria) in these wilderness areas in the future. This would allow improvement of important habitats in the future and increase the diversity (both vegetation and wildlife) in these areas. Since prescribed burning will probably be the only type of habitat improvement allowed in these areas, there should be enough flexibility relative to livestock grazing to treat areas from use prior to burning to allow for the build-up of fine fuels. This would be especially true in some of the lower elevational, lower precipitation upland-grassland areas that will require revegetation. Apparently the opportunity exists to delineate areas for prescribed burning within each wilderness area through the individual plans which will be written at a later date.

Comments on Specific WSA's

Dragon Buttes WSA
Saffalo Bump WSA
Sand Dunes WSA
Bismarck Buttes WSA

For these wilderness study areas, little need is currently seen for habitat improvement projects. Valuable habitats for all species can be better served by protection from disturbance. Little negative impact is expected as a result of the somewhat reduced access to recreationalists. The proposed partial wilderness of 37,927 acres of the 42,046 acres in the Bismarck Buttes WSA will greatly benefit the wildlife resource. Among other things, this and the Dragon Buttes WSA support high raptor concentrations. The Sand Dunes and Saffalo Bump WSA will provide protection for important water bird habitats.

Mr. Rod Miller
January 27, 1989
Page 3 - B182053.1

Alkali Draw WMA
South Pinnacles WMA
Whitethroats WMA
Devils Playground-Twin Buttes WMA
Red Creek Redlands WMA

We do not anticipate any significant negative impacts to wildlife as a result of these areas not being designated as wilderness. However, we question why Wilderness Creek, with its value to raptors, big game and fishers, and other species was not included in the Honeycomb Buttes (Oregon Buttes Wilderness). The presence of one two-track road should not preclude Wilderness Status and its small size is irrelevant because it is contiguous with Oregon Buttes.

Red Creek Redlands has juniper habitat within the area designated as crucial habitat for semi-independent songbird species as is stated in the EIS. The Red Creek Redlands WMA is crucial winter range for mule deer. Whereas almost the entire WMA falls within the Red Creek Watershed ACOU, some protection is given to this crucial range. This, however, may not be sufficient protection as we have indicated previously.

Wilderness designations would more likely to maintain these values. With a change in policy allowing prescribed burning as well as other improvements as long as they meet certain "nonimpairment criteria," crucial wildlife winter ranges not only have the protection they deserve but also the potential for improvement.

Although the Whitethroats Creek WMA does not contain any crucial range, it does contain some elk winter range on its boundary with the Oregon Buttes WMA. Consideration to incorporate this winter range into the proposed Oregon Buttes Wilderness Area may be appropriate.

Alkali Basin-East Sand Dunes WMA
Red Lake WMA

The Alkali Basin-East Sand Dunes WMA was recommended for wilderness designation in 1982 to provide protection for undisturbed elk and antelope habitat. This recommendation is still valid as pre-FLPMA leases have expired and wilderness designation would now do much to provide needed habitat protection.

The Red Lake WMA was not recommended for wilderness designation in 1982, but we suggested it had potential to be an ACOU. Due to its location adjacent to the Alkali Basin-East Sand Dunes WMA (which we recommended as wilderness), designating the Red Lake WMA as wilderness would provide additional protection to valuable wildlife habitat in this area. Between the two WMAs, only 22,315 acres would be wilderness.

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Mr. Rod Miller
January 27, 1989
Page 4 - B182053.1

Raymond Mountain WMA

This is perhaps the most important WMA listed because of overlapping mule deer, elk, and moose crucial ranges. Almost the entire area is designated as crucial moose winter range, approximately 75% as crucial elk winter range and approximately 20% as mule deer crucial winter range. The proposed "All Wilderness" designation is supported by this Department to provide the protection these crucial ranges deserve.

In the future wilderness plan, habitat improvement potential through prescribed burns should be addressed, especially concerning aspen and willow tracts.

Positive and negative impacts not addressed in the draft but that may be of future consequence are:

1. Designating the Raymond WMA as a wilderness area may decrease public road access which, in turn, may negatively affect harvest, hunter success, and wildlife distribution. There is also the potential for hunters who presently use vehicles on Raymond Mountain to be replaced by those who hunt on foot or horseback.
2. Nonresidents who hunt within the boundaries of the Raymond WMA would be required by law to hunt with a guide. There are likely nonresidents who presently hunt the Raymond Mountain area without guides. In 1987, the number of nonresidents hunting in elk hunt area 103 and deer hunt area 126 were 49 and 211, respectively. The change to wilderness designation will not significantly affect nonresident elk hunters since not all of these people hunted Raymond Mountain and many probably hunted with one of the six outfitters in the area. However, deer area 116 has the highest nonresident and overall hunter success of the seven hunt areas in the Opening Range herd. If hunter numbers decrease due to wilderness designation, the decrease will probably be in numbers of nonresident deer hunters who may be displaced to other hunt areas in the region due to the wilderness guide law.
3. The loss of 100 days of snowmachine use includes the potential loss of some revenue and harvest from trappers within the WMA boundary. Much of the activity conducted from snowmachines within the area is fur-bearing harvest which may be diminished a wilderness designation.
4. Livestock grazing and ADNs will be maintained within the Raymond WMA. This is not a problem for wildlife at present because there are habitat management measures in the plan to protect wildlife and wildlife habitat from excessive competition. However, a worst case scenario could include removal of livestock grazing from wilderness areas at some future time with the loss

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Mr. Rod Miller
January 27, 1989
Page 5 - 812035.1

ACMs being added to adjacent federal non-wilderness areas. This could cause overgrazing on other important wildlife habitats. An example of this type of livestock management occurred on the Fossil Butte National Monument. In the case of Raymond Mountain, adjacent private and public lands are equally important wildlife winter range as areas within the Raymond WSA.

Lake Mountain WSA

We do not agree with the No Wilderness-to Action decision for this WSA. Over 70% of winter use by elk from LaSage Creek to South River Creek occurs on this site. At least 250 elk annually used the winter range extending from Graphite Hollow to Long Hollow 1978 to 1988. Mile deer, moose, and mountain lion also rely on this area during the winter. If the area is further developed, we doubt existing numbers of animals can be supported.

If development increases, more of the winter range to the north will lose its ability to support elk. This would increase the value of the Lake Mountain area. Further fragmentation of winter ranges will, at some point in time, result in a cessation of elk use of certain areas. This may have already occurred to some extent between Graphite Hollow and Elley Ridge.

Many of the wilderness study areas contain crucial big game habitat for single species, however, only 2 contain crucial habitat for 2 or more species. Lake Mountain is one of these, containing crucial winter range for both mule deer and elk. Much of these crucial winter range also overlap making the area even more important. The South Creek Wildlife ACR designation for 4200 acres within the WSA further indicates the importance of the area and provides some degree of protection for these habitats. Much of these crucial and overlapping crucial ranges are not within the ACR. These would be provided for under the wilderness designation.

With this WSA there is mention of prescribed burning of 200 acres over the 20 years to "improve elk winter range in areas away from surface disturbance and human activity". While the concept is feasible and desirable the logistics may not be feasible. If all 200 acres were burned in one year, or at least half of it in one year the benefits would probably be desirable. Burning much less than this would probably tend to concentrate animals, eliminating many of the benefits for which the burn was performed. The figure of 1000 acres or more over 20 years would be more beneficial to wildlife. We suggest this should address treatments to rejuvenate aspen and some areas have already been identified for improvement in this area.

If the No Action Alternative is upheld by the BLM, we recommend a cumulative impact assessment be conducted prior to any further oil and gas exploration and development. This assessment should carefully evaluate "No Surface Occupancy"

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Mr. Rod Miller
January 27, 1989
Page 4 - 812035.1

negotiations on additional areas to protect crucial big game winter ranges. The assessment should also review essential human use levels, habitat modifications, and development activity levels that will allow maintaining elk use of existing winter range and enhance use of historic and potential use areas.

Thank you for the opportunity to comment.

Sincerely,


FRANCIS PETERA
ASSISTANT DIRECTOR
OPERATIONS

JF:GCT:ee
cc: Game Div.
Fish Div.
SATS Div.
USFWS-Chayama

CC. MONTGOMERY (10/11/82)
Boris Hansen
Inspector
Mason HATT
449
DR. S
BLM

U.S. FISH AND WILDLIFE SERVICE

RECEIVED

APR 10 1983

CHEYENNE
ECO. SERV.

April 4, 1983

BIS 2013/L1
Bureau of Land Management
Rock Springs District Wilderness

Mr. Dick Hartman
State Planning Coordinator
1330 Capitol Avenue
Cheyenne, Wyoming 82002

Dear Mr. Hartman:

In response to your referral letter of February 1, 1983, the following comments are offered regarding the Rock Springs District Wilderness NMS:

Our position on wilderness designation for tracts within the Rock Springs District is a matter of record. In 1979, we recommended the following tracts for wilderness designation, because of their sensitive status and value to wildlife:

Loch Creek	9,400 acres	Norris Slooph	13,402 acres
Lake Mountain	14,000 acres	213 Mountain	10,201 acres
Raymond Mountain	34,756 acres	Adobe Town	41,150 acres
Red Sand Dunes	11,514 acres		

In addition to our prior recommendations, we offer the following comments on this NMS:

1. The Lake Mountain and Raymond Mountain Wilderness Study Area (WSA) appear to be the only WSA's in this document which contain any fish/creeks. Neither has been proposed for wilderness classification under the proposed activities alternatives. In both cases, however, the streams containing pure streams of Bear River outthroat (Raymond Mountain) and Colorado River outthroat (Lake Mountain) have been included in areas of Critical Environmental Concern's (CEC). Management plans which have been prepared for the ACEC's, should address the outthroat fisheries of these areas and would presumably provide as much protection as wilderness designation for these trout species. Such a designation would not preclude livestock grazing or drilling where pre-FLRA leases exist, and we feel that it would offer as much protection to aquatic resources as any of the alternatives.

449

Mr. Dick Hartman
April 4, 1983
BIS 2013/L1, Page 2

2. It is still our opinion the Raymond Mountain WSA should be designated as wilderness or, at the very least an ACEC. We are particularly concerned about maintaining elk and moose winter range in this area, and we believe such designations would protect this habitat.

We suggest it would have been helpful to the BLM if there had been closer coordination with this Department in developing this NMS. For example, on the Raymond Mountain tract, NMS indicates observations of 150 elk and "two dozen" moose during the winter of 1980-81. Our information shows the following:

Species	No. Observed	Months
Elk	342	1879-1980
Moose	426	1981-1982
	22	1877-1878
	34	1882-1883

3. No mention is made of sage grouse in the Buffalo Hump, Sand Dunes, Alkali Draw, South Flinnelies, Oregon Buttes, or Red Creek Badlands WSAs. Nesting and brooding areas are on all of these tracts. There are sage grouse wintering areas in all but the Oregon Buttes WSA. Additionally, there are strutting grounds in the Red Creek Badlands tract.

4. We did not recommend Oregon Buttes for wilderness designation in 1979. However, we feel the unique nature of habitats in this area deserve some recognition. As human activity in the northern Red Desert increases, the value of this area to wildlife might be increased significantly by designation as an ACEC. Pre 1976 oil and gas leases stand over a significant portion of this WSA, but oil and gas development could still occur, despite such designations, but reclamation standards might be more stringent.

5. The Alkali Basin-East Sand Dunes WSA was recommended for wilderness designation in 1979 to provide protection for undisturbed elk and antelope habitat. However, current BLM policy would allow exploration and development of oil and gas leases granted prior to 1976 leases, which extend over 50 percent of this tract. Thus, unless oil and gas development were prohibited in this area, wilderness designation would not provide protection for the habitat involved. Designation as an ACEC might provide more assurance of adequate protection.

6. The Red Lake WSA is not recommended for wilderness designation, but in our opinion it has potential for ACEC designation.

7. The Lake Mountain WSA is not proposed for wilderness designation under the proposed action, but the Rock Creek area is to be

Mr. Dick Hartman
April 4, 1983
EIS 2033/2a, Page 3

designated as an ACEC. We believe such an ACEC designation will provide adequate protection for elk winter range. However, no such designation is proposed for the Deepdale Hollow area. Oil and gas development in this area on critical elk winter range is of concern to us. If adequate protection for the Deepdale Hollow area cannot be accomplished by other means, we cannot support deletion of the entire Lake Mountain NMA from consideration.

5. Two minor technical errors were noted:

- a. On Map D-5, the locations of critical elk winter range and the Bench Currel feedground should be the same - T12N, R12W.
- b. A whooping crane has been observed on Fosseneils Creek during the summers of 1981 and 1982.

Please contact this office if we may be of further help.

Sincerely,

FRANCIS PETERA
ASSISTANT DIRECTOR, OPERATIONS
WYOMING GAME AND FISH DEPARTMENT

FR:RSH:blh
DWT Game Division
Fish Division

DIRECTOR AND
STATE GEOLOGIST
GARY S. GILLES
SHERMAN BUILDING
CHEYENNE, WYOMING

Survey Wyoming Since 1912



THE GEOLOGICAL SURVEY OF WYOMING

BOX 2008, UNIVERSITY STATION
LARAMIE, WYOMING 82071
307/786-2286

December 8, 1985

Mr. Alan Edwards
State Planning Commissioner's Office
Researcher Building, 2nd Floor East
Cheyenne, Wyoming 82002

Dear Alan:

If my comments are not passed along to BLM, I will understand. But I truly believe it is in the State's best interests to oppose these five recommended wilderness areas as strongly as possible. These are all areas with "high" potential for oil and gas development, and they have some other mineral potential as well. They can be managed under multiple use with little loss to other values, and there are already more than ample wilderness areas in Wyoming.

What will, or for that matter, what can the BLM do to compensate Wyoming, its communities, its schools, or even its petroleum industry for unrealized income, revenue, and jobs related to unrealized production of oil and gas from these WSAs?

We have prepared documents dating back to 1979, which show the energy and mineral resources in all five of these areas. BLM chose to delete the areas with little mineral potential from a wilderness designation and compromise by only recommending five areas - essentially the five areas with the highest mineral potential.

I will be glad to sit down and discuss this with you and (or) the Governor as I think it is important. Although the BLM's estimates of lost gas and oil production are probably understated, this lost production still amounts to at least \$67.6 million in potential revenue to Wyoming. Can we afford to commit ourselves in these matters?

Sincerely,

Gary S. Gilles
State Geologist

DGC:sh

Response to Letter 450

1. The Buffalo Hump WSA and the western part of the Sand Dunes WSA appear to have a lower potential for oil and gas production than the eastern parts of the Sand Dunes WSA. Due to past drilling to the south of the Sand Dunes WSA and other factors, we do not feel that any oil and gas production would be lost from the Buffalo Hump WSA.

Multiple use management would preserve most values in the WSAs. However, activities such as oil and gas development, road construction, motorized vehicle use, and others would not be compatible with wilderness values. The EIS was prepared to comply with BLM's responsibilities under the Wilderness Act of 1964 to inventory public lands, identify those that meet wilderness characteristics, and recommend those suitable for wilderness designation. Figures slightly different from the ones you provided were used to estimate oil and gas values foregone under wilderness designation.

Wilderness is an integral part of BLM's overall approach to multiple use management of all the public lands. Frequently, when a parcel of land is devoted to one use, it may be to the exclusion of other uses. Congress fully recognized that something would be given up when an area is designated wilderness. This EIS identifies the tradeoffs.



THE GEOLOGICAL SURVEY OF WYOMING
2024 BOULDER UNIVERSITY STATION
LARAMIE, WYOMING 82001
307.733.2100

MEMORANDUM

TO: Alan Edwards, State Planning Coordinator's Office
FROM: Gary S. Glass, State Geologist
SUBJECT: Revised EIS on Rock Springs District Wilderness (State Identifier # 03-105)
DATE: December 8, 1988

My staff and I have reviewed the Wilderness recommendations for the Rock Springs District, and we concur with the U.S. Bureau of Land Management's (BLM's) preferred alternatives of "no wilderness" for the Lake Mountain, Alkali Draw, South Pinnacles, Alkali Basin-Sand Dunes, Red Lake, Whitethorpe Creek, Devils Playground-Twin Buttes, and Red Creek Badlands MSAs.

We cannot, however, support the BLM's "wilderness" designations for the Raymond Mountain, Buffalo Ramp, Sand Dunes, Honeycomb Buttes, and Oregon Buttes MSAs. These lands should be managed under a multiple use strategy. As justification for our position, we note that approximately 100,000 acres of potentially productive oil and natural gas lands will be withdrawn under BLM's preferred alternatives. By the BLM's own estimates, the withdrawal of the Raymond Mountain, Sand Dunes, Honeycomb Buttes, and Oregon Buttes MSAs will result in the loss of 23.5 billion cubic feet of natural gas and 154,702 barrels of condensate, at \$1.00 per cubic foot of gas and \$18 per barrel of oil, that translates into more than \$46 million in Federal royalties (one-half of which would come back to Wyoming). The lost production would amount to over \$20 million in severance taxes and another \$23 million in Ad Valorem taxes as well as the tax losses on facilities and the many unutilized jobs that could result from drilling and development. The lost oil and gas production attributable to the Buffalo Ramp MSA was not even calculated although we rate this MSA as having "high" oil and gas potential.

1

450

Alan Edwards
December 8, 1988
Page 2

Accepting that these MSAs have other values in addition to oil and gas, we do not feel the EIS really addresses why multiple use management strategies for these lands could not be used to preserve most of the other values while at the same time allowing the development of valuable and needed oil and gas resources. Our point is that there are management strategies, which though not strictly preserving these areas in a wilderness status, would protect most of the other values and accommodate the recovery of energy resources at the same time.

1

We also noted an error on page 88. In the first sentence in the section on Supplemental Values, the fossils areocene in MSAs, not Paleocene. It may be important to note that the "former riparian habitat" mentioned in this first sentence refers to conditions over 16.6 million years ago.

2

I note that on pages 155 and 156 of the EIS, there are summaries of some public opinion polls. In the 1979 poll, 47 percent of those polled felt there was "already considerable wilderness acreage in Wyoming and any additions should be kept to a minimum." In 1981, 58% of those polled believed energy resources and minerals should be developed even in wilderness areas. What is more important is that the wording of the second survey makes it obvious that many of the remaining 41 percent of persons responding are only saying that energy resources and minerals should not be developed in existing wilderness areas. By the way the poll was worded, you cannot say that 41 percent of those polled necessarily supports more wilderness. You can only say that 41 percent supports protection of designated wilderness areas. My point is that "MSAs" are not "wilderness areas" until that designation is made. In my estimation, public attitudes do "deserve a hard look by BLM before proposing wilderness designation." In this case, I do not think it is in the public interest to designate these valuable energy resource areas as additional wilderness areas.

2. Thank you for your information. We corrected the text in the Final EIS.



Public Service Commission

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M E M B E R S

TO: ALAN EDWARDS
NATURAL RESOURCES ANALYST
STATE PLANNING COORDINATOR'S OFFICE

FROM: JIM JACQUOT
CHIEF ENGINEER
PUBLIC SERVICE COMMISSION

DATE: DECEMBER 5, 1988

RE: RLM ROCK SPRINGS DISTRICT REVISED DRAFT WILDERNESS
ENVIRONMENTAL IMPACT STATEMENT, STATE IDENTIFIER NO.
83-105

Thank you for the opportunity to comment on this matter. It appears that the proposed wilderness areas will not encumber the construction of utility end/or pipeline facilities nor encumber the provision of utility service. We do, however, have a continuing concern that such encumbrances do not occur. We therefore request that no unreasonable restrictions be placed on provision of utility service end/or the construction of utility end pipeline facilities in the vicinity of the recommended wilderness areas.

If you should have any questions regarding this request please let us know.

/ee

Response to Letter 451

Undue restrictions to pipelines or utility facilities in the vicinity of WSAs are not anticipated. However, should any WSAs be designated, the wilderness area would be closed to such facilities.



JAN 27 1989

State Engineer's Office

HERSCHLER BUILDING CHEYENNE WYOMING 82002

January 25, 1989

Mr. Alan Edwards
State Planning Coordinator's Office
Herschler Building, 2E
Cheyenne, WY 82002

RE: Rock Springs RLM
Revised Wilderness EIS
State IO 83-105

Dear Mr. Edwards:

We have reviewed the revised Wilderness Environmental Impact Statement (EIS) for the Rock Springs RLM District and offer these comments related to water rights and water resources implications of the EIS. From the maps showing wilderness boundaries in the EIS, it appears the following water rights are wholly or partially within the Wilderness Study Area (WSA):

WSA's Recommended for Wilderness

WSA	Permit Number	Priority Date	Use Amount	Source
Raymond Mtn.	33968	9/12/16	44.46 AF	Birch Creek
"	14568	9/12/16	36 ac.	Swanson Reservoir
"	14561	9/12/16	56 ac.	"
"	14562	9/12/16	24 ac.	Spring
Sand Dunes	34678	3/16/18	4.2 AF	Ocer Spring
"	15018	3/16/18	10 ac.	"
Honeycomb Buttes	SR154	1/14/49	STX 2.95 AF	Sand Creek
	SR360	4/3/64	STX 35.8 AF	Nicelle Draw

WSA's Not Recommended for Wilderness

Red Lake	11339	7/27/12	IRR	Red Creek
Davil's Plygrd	27115	10/2/80	IND In-situ	Lower Snake Draw
"	26 1/314	12/19/88	STX 19.87 AF	Pine Draw
"	SR300	4/11/77	STX 2.98 AF	Pipeline #1 Crew

Responses to Letter 452

1. Thank you for your comment. See response to Comment 448 on water rights.
2. We are familiar with the permit procedures for water development projects.

Rock Springs Wilderness EIS
January 28, 1989
Page 2

These permits entitle the holder to put Wyoming water to beneficial use when water is available. The addition of BLM lands to the wilderness system should not compromise these rights in any manner. It may be possible to slightly alter boundaries such that the diversion and/or point of use are not within the wilderness area. This would appear to be possible in the Raymond Mountain WSA where the lands with water rights could be eliminated by moving the southern border north about 3/4 of a mile.

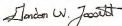
We hope the BLM and entire Department of Interior will adhere to our understanding of Solicitor Ralph Tarr's opinion regarding wilderness area implied reserved rights. We believe his view is correct, i.e., no such rights exist unless expressly provided by Congress, and that rights for all water uses shall be obtained under state law. This is an important principle to preserve with the BLM Wilderness studies.

The BLM plans to construct various water development projects on page 28 spring development on headwaters of Rock Creek in the Lake Mountain WSA; page 111 cells for reconstruction of a stock reservoir in the Honeycomb Buttes WSA; and, pothole development is discussed on page 112 for wildlife and livestock uses. Each of these activities require permits from this agency prior to construction.

The Red Creek Badlands WSA lies within the 59,532-acre Red Creek Watershed ACRD. Through our participation in the Colorado River Salinity Control Forum, this office is cognizant of the importance of reducing salinity loads to the Colorado River system. We are pleased to see the BLM recognize the merits of managing entire watersheds as a unit.

Thank you for the opportunity to comment on this EIS. If we can provide any additional information, please don't hesitate to contact us.

With best regards,



Gordon W. Fassett
State Engineer

GWF/SL

cc: Frank J. Tralasa, Surface Water and Engineering Admin.
Sue Lovry, Interagency Stream Engineer
John Teichert, Division IV Superintendent
Rebecca L. Mathisen, Technical Services Admin.

1

2

Responses to Letter 453

1. There are no historic buildings in any of the WSAs.
2. If any WSAs are not designated, there would be a potential impact to cultural resources from authorized activities. When such an activity is proposed, BLM would follow all required procedures to consider the impacts of the activity to cultural resources.

1

2

January 10, 1989

Wyoming State Clearinghouse
ATTN: Mr. Alan Edwards
State Planning Coordinator's Office
Harscher Building
Cheyenne, Wyoming 82002

RE: Rock Springs District Revised Draft Wilderness EIS, SA1 883-106
(SHP0F0189FC074)

Dear Mr. Edwards:

The Wyoming State Historic Preservation Office is concerned that the BLM apparently failed to address the potential effects of the proposed actions on cultural resources. In general, we support wilderness designations because this often results in disturbed impacts to historic properties. An exception to this is historic buildings which may require periodic maintenance in order to preserve structural integrity. Unless special covenants are applied, historic structures within wilderness areas are usually subject to natural deterioration.

Most of the actions under consideration include "no wilderness" and "partial wilderness" proposals. We would like to point out that either proposal may result in impacts to cultural resources which have not been identified in the subject DEIS.

We would also like to note that the management of cultural resources on BLM projects is conducted in accordance with 1) a memorandum of understanding between the BLM and SHPO and 2) 36CFR200. Both documents call for survey, evaluation, and protection of significant historic and prehistoric sites prior to disturbance. As long as the BLM follows these established procedures, we have no substantive objections to the actions described in the subject DEIS.

Sincerely,



Thomas E. Marceau
Deputy SHPO

FOR:
Dave Kathie, Ph.D.
State Historic Preservation Officer

STATE WILDERNESS

The Manager - Camp Evans
Landscape Architect

RF Howe - Chief Draftsman
C. J. ...

Chief ...
Marty ...

Frank ...
Casper

Linda ...

George ...

...

...

...

...

...

...



454

Wyoming State Forestry Division
1100 WEST 23RD STREET CHEYENNE, WYOMING 82002
JANUARY 31, 1989

Mr. Alan Stein, Wilderness Team Leader
Rock Springs WSA District
P.O. Box 1809
Rock Springs, WY 82902-1809

RE: Rock Springs Wilderness RIS
Raymond Mountain WSA

Dear Mr. Stein:

This refers to your proposed action to manage Raymond Mountain as a "Wilderness Area".

We have two concerns about the proposal. The first being that adjacent Bridger-Teton National Forest lands near Raymond Mountain were studied for wilderness suitability during the Forest Service's BARS II process, but were not recommended for wilderness at that time (page 15).

The second area of concern is that, within the Raymond Wm. WSA, there are 1,300 acres of State owned lands, containing 328 acres of forested lands (lodgepole pine and Douglas fir stands). Wilderness classification of this area will preclude access to this 1,300 acres of State land for forest management, forest and disease, fire protection, livestock grazing, and mineral development. There are 200 acres of private lands that will be affected in a similar manner.

We feel that additional discussion needs to occur before the multi-management nature of this State ownership is lost.

Very truly yours,

Michael E. Dagan
Michael E. Dagan
Deputy State Forester

MS:ieb

Response to Letter 454

If the Raymond Mountain WSA is designated wilderness, BLM would work with the State to exchange State lands within the WSA so that the State's ability to generate revenue from State lands is not hindered by wilderness designation and the integrity of the wilderness area is preserved. BLM would also work with private landowners to exchange their lands if they are willing.



JAN 31 1989

455

THE STATE OF WYOMING

BRIAN SWALLYER GOVERNOR

Water Development Commission

HERSCHEL BUILDING TELEPHONE: 307-777-7928 CHEYENNE, WYOMING 82002

Michael E. Powell
Administrator

Beryl J. Churchill
William E. Stone
Marion Goodson
Paul Walker
Walter Myers
Jim Hays
Linda Frazee
Muriel Hays
Kathleen Sun

MEMORANDUM

TO: Pete Montfield

FROM: John M. Jackson

SUBJECT: Comments on *Rock Springs* District Revised Draft Wilderness RIS, 84-138A-Whiskey Mountain and Nahala Badlands Draft Wilderness Supplement to Lander RW

DATE: January 31, 1989

Rock Springs District

1. Raymond Mountains. The recommendation is for all wilderness. The designation could adversely impact potential water development projects in the Thomas Fork drainage. Some of the lands irrigated from the Thomas Fork system experience frequent irrigation water shortages.
2. Devils Playground - Twin Buttes: The area map shows numerous small reservoirs within the study area.

Whiskey Mountain

The proposed action is no wilderness and I concur with that recommendation.

JMJ/wsb

*Same in a letter
memo prepared*

Response to Letter 455

Designation of the Raymond Mountain WSA as wilderness would reduce the potential for water resource development in the Thomas Fork drainage. However, irrigation water shortages are not expected to be exacerbated by the designation of the WSA.



REPRESENTATIVE CHRIS PLANT
 Cheyenne County
 2001 State Office Building
 Cheyenne, Wyoming 82002
 District: 1
 Telephone: 337-1773
 Fax: 337-1773

District Manager
 BLM Rock Springs District
 P.O. Box 1069
 Rock Springs, WY 82902

Dear Sir,

As a Wyoming State Representative I talk with quite a few people from Rock Springs as well as from around the state. I have noticed an appreciable change in the sentiment of a substantial number of Wyomingites. People enjoy solitude, wilderness and quiet vistas undisturbed by the effects of development when they want to get away from the bustle and bustle of every day life.

With that in mind, I reread the revised draft of the Rock Springs District Wilderness Environmental Impact Statement with considerable interest. I appreciate the amount of research that went into this new document and am glad you recommended the Oregon Buttes, Continental Peak and part of Honeycomb Buttes area. I would urge you to complete that spectacular portion of the northern desert by recommending Whitehorse Creek and the rest of the Honeycomb for wilderness protection. These would complement the separate sections and make the wilderness management that much easier for you, since it could be managed more as a single unit. I also appreciate the partial recommendation given the Sand Dunes and Buffalo Hump. There are enough off users in this area that a designated part of the dunes would be good for them, but I consider all of Buffalo Hump worthy of wilderness designation.

Devil's Playground and Red Creek Bedlands near Fleming Gorge would also be welcome areas for protection by the national wilderness system. I have enjoyed the peacefulness of Alkali Basin and Alkali Draw that I shared with only a few antelope in the area. Lake Mountain in the upper Green River Basin provides welcome winter range for the elk there and would benefit well from the wilderness protection.

An underlying theme that presents itself here is that I get the feeling of a few small islands of wilderness in a sea of oil and gas fields, roads, mining claims and grazing leases. Multiple use management is defensible and I think it should take into consideration all the needs of all the people. Therefore, I would like to see the BLM develop a more unified management approach for the Red Desert. This should be in cooperation with the BLM and Lander BLM personnel. As Wyoming attempts to get the feet back on the ground economically, it would be advantageous to have areas that can serve as a destination attraction to visitors who appreciate our state's vast beauty. Areas such as Steamboat Mountain deserve special protection that will not allow the further degradation of such an unusual oasis in the desert.

If you need any help in further development of this concept, I would be glad to offer suggestions I have.

Respectfully submitted,
 Chris Plant

Response to Letter 285

The BLM recently started preparation of a Resource Management Plan (RMP) for the Green River Resource Area. Concern for managing the Red Desert was raised during scoping. Management of the part of the Red Desert in the Rock Springs District will be analyzed in the EIS for the RMP. During preparation of the RMP, BLM will determine if a special management plan is needed for the area.

NOMEX

NUCLEAR MINERALS EXPLORATION

8

(307) 392-2907

HENRY J. HUBBARD, JR.
 Cheyenne

November 22, 1988

BOX 474
 LANDER, WYO. 82830

Alan Stein
 Rock Springs District, BLM
 Box 1069
 Rock Springs, WY 82902-1069

Re: EIS, Revised Draft

Dear Mr. Stein:

I feel too much of the public land has already been looked up with wilderness designation. There are wilderness study areas presently being examined in a great portion of the public lands in the West. Even though the revised draft has considerable non-recommended areas, I feel none of the areas should be recommended. The oil and gas business is experiencing a low ebb at the present time, but with non-renewable resources such as these, we should look to the future when this situation might not exist. The oil and gas potential of these recommended areas has not been discovered to my knowledge, and the day may come when they will need to be exploited. Other minerals may exist also.

I believe more than enough land is already withdrawn through wilderness designation and am emphatically against any further withdrawals.

Enclosed are two articles which help describe the current state of areas already withdrawn.

Thank you for the opportunity to express my opinion and view.

Yours truly,

Henry J. Hubbard, Jr.

RECEIVED

NOV 25 1988

DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 ROCK SPRINGS DISTRICT

Letters Received From Organizations, Industry, and Individuals

Response to Letter 8

Based on existing information, we estimated the potential for the presence of oil and gas in each WSA. Some have a greater potential than others. The EIS estimates the quantity of oil and gas that could be foregone if an area is designated wilderness. When the wilderness study was started, the WSAs were mostly leased and open to exploration and development. There was little exploration. While this does not mean that oil and gas resources are absent, it indicates that the level of industry interest is somewhat lower than in other areas. The fact that oil and gas may be present, although an important consideration, does not preclude consideration of an area as suitable for wilderness designation. The relatively low level of oil and gas activity is due primarily to the relatively low prices.

Guest Editorial

WILDERNESS FOR WHOM?

by Ron Beckman, President
Mother Lode Miners Association

Several articles have been appearing recently in newspaper and magazine publications throughout the country expounding the virtues of the proposed wilderness bills now before Congress for consideration. The least which has come to our attention, appeared in the May issue of *Sunrise Magazine*.

The Mother Lode Miners Association, a national organization of small miners based in Forestville, California, feels that the time has come to reexamine some of these articles as well as to certain groups of individuals who have labeled themselves environmentalists, or conservationists. In brief, the definition of a wilderness area is a sector of public land which has been determined, after study and analysis, to be worthy of preservation in its state to warrant special protective measures. The areas are to remain roadless and shall be open to the public only by hiking, mule or horse pack trails, or the use of guides. The message, however, throughout the western U.S. now being millions of acres which various groups are already claiming is too small and one hard to work to provide additional access to these, one before Congress, have even been designated as wilderness.

We would like to address some other problems that have not been thoroughly looked at by those who are proposing these designations.

We would first like to look at the definition of "Public Land." From the inception of the United States, it was noted by those with longed-for vision that certain tracts of land must not of necessity remain public domain for all the people of the United States. These lands were and are to be held in public trust and to be managed by certain agencies such as the U.S. Forest Service and the Bureau of Land Management (BLM). Over recent years, a misconception has grown among the general public that the lands under the control of these agencies are in fact controlled by them. This concept is untrue. The government cannot "own" any territory. Public lands still belong to every American and are only being held in a custodial role for him.

The wilderness bill concept will in effect allow that public trust. It will take these lands and lock them out of a certain segment of the public, while allowing others to enjoy their rights and access. So, in reality, an elite group of the American public will be utilizing these areas, while others will be cut off from them. Because these acreages are to remain roadless, the handicapped and disabled will not be able to visit them. The sick and elderly will also be denied the right. Since much of the areas will only be accessible by guide, pack animals, which can traverse only difficult terrain, and the poor who cannot afford this luxury will also be excluded. This means that only the healthy, middle class and upper middle class will be afforded use of public property including wilderness areas which the nation possesses. We cannot help but feel that this is discrimination and violates the "public trust."

We are further shocked to be aware that these regions that the managing agency shall be allowed to go in and fight the bears. But how were they to accomplish this? It is possible to do so by permit. A check with the Forest Service and BLM who maintain such special firefighting defenses as borax dumps and herbicides and water-carrying helicopters will show that without ground crew and heavy equipment on the scene, an aerial attack is virtually useless. The results could be catastrophic. If crowds are allowed to be restricted in such an emergency, these areas could no longer be defined as "wilderness" under the definition now being set forth.

A road build does not create a serious environmental impact. But proponents of roadless areas will charge that when you build a road, you invite people and that the people themselves cause a destructive force upon the lands. Let us look, for a moment, at who these people are...

Continued page 4

Advisory Committee Formed For Strategic Materials & Minerals

Washington, D.C.—Secretary of the Interior William Clark has announced the appointment of 24 members, from the academic, business, environmental, and State government groups, to serve on a newly-created National Strategic Materials and Minerals Program Advisory Committee. The committee will be headed by retired Admiral William C. Mohr, of the National Strategy Information Center.

Secretary Clark said the committee will explore an aggressive and coordinated public information program for strategic and critical minerals and materials. He noted that special emphasis will be placed on lifting the morale of the Federal Land Policy and Management Act of 1976, the National Strategic Materials and Minerals Policy, Research and Development Act of 1980, the Defense Production Act of 1950, as amended, and the Strategic and Critical Minerals Stock Piling Revision Act of 1979.

Clark said, "We depend on foreign producers for too large a portion of nearly 25 minerals that are essential to our national security. America's continuing dependence on foreign sources for its strategic and economic security needs is of great concern to the country, the President, and to me."

"Creation of this advisory committee provides the vehicle for carrying out goals set by Congress and the President," Clark said. "The broadly based, bi-partisan committee will have the latitude and flexibility to identify rapidly changing conditions. It will identify specific national minerals and materials needs and make recommendations to address those needs."

Admiral Mohr is General Counsel and Director of the National Highway Information Center (NHIC), a private nonprofit organization established in 1982 to render education in international security affairs. He was formerly Executive Director of NHIC Council on Economics and National Security, created in 1991 to promote awareness of U.S. dependence on foreign sources of oil, fuel and non-fuel minerals, industrial competitiveness & mobilization planning. □

BEST SOCIAL

By Tom W. Jones

For years a classic battle has been waged between those who have studied themselves convinced and those who believe to be enemy—the conservationist and public land user. The timber and mining industry. Conservationists have argued that these types of users are chewing up the public domain, that they are destroying the environment, and that mines and logging are intruded only in profits, without caring about the lands themselves. I may mean that was the average man or woman of the street, but in fact it is untrue. The fact is the environmentalist is lighting it not really in these

actors, but within their own ranks—recreational public land use. The hiker, camper, hiker, hunter, rifle, off-road user, etc., all must bear the blame of inflicting more damage on forests, streams, in fact, all public lands, than any commercial user. The chief cause of forest fires is camper and hiker. These are people who are not concerned with meticulous maintenance, they manage every penny, many who believe they are conservationists at heart and probably none to one of the many environmental groups. Each year, tens of thousands of acres are cleared by campfires that were thought to be put out, or cigarettes that were thought to be crushed. Beautiful forests are obliterated by the magnification of the law through direct broken bottles.

The writer and his family has spent some twenty years in the remote areas operating small mines. I have witnessed and put out countless campfires left behind that even though washed with water had not been extinguished. Campers people are today being allowed access to wilderness areas and said to be the users and are given that right in those areas of land now before the Congress for consideration. It is not uncommon for members of

our organization, all small mine operators, to be invited to visit the remote areas and come upon nests and birds sprayed with insecticide. The greater the effort to create a monument to himself, it is not uncommon to come across insects comparable with garbage strewn everywhere left in those who were able to pack their supplies in, but who were too weak to pack the garbage and cans out. Human waste is found everywhere with toilet paper embedded in bushes or tree limbs. Cigarette butts are spotted scattered in pine needles. Disposable baby diapers are found tucked nearly under rocks. Truly these are our sinner and let because some remote rancher camped found that great smooch does not burn. This and much more. Those who committed these acts still have the freedom to visit wilderness areas and thereby are since these areas will not be in danger of being polluted by the management processes.

The worker destruction on public lands by campers and mountaineers has reached epidemic proportions. There is another land user who is eagerly looking forward to the removal of more wilderness areas. Marijuana or "Pot" grow. This

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grower has become a serious problem in the states of California, Oregon, and Washington, where he has virtually taken over some important public lands. The problem has become so serious that states and federal environmental agencies have joined in an organized campaign against Marijuana. Many CADEP, but growing mining use scientific response and lobby helps to protect their crops. All areas attended by this writer, I was shown baby traps which are rigged along with in soil growing areas that will blow your legs off and you are dead. But growers do not mind roads since they are in a financial position to be able to afford helicopters to take their harvest crops out from there. They do not mind roads and they do not mind other land users, such as loggers and campers in the areas. They are in the public. They can handle themselves. They can handle themselves, dollars, as what the value of your life or your family's compared to that they will be in the wilderness areas and will thrive.

A major premise that has kept the country strong throughout our history

California Mining Journal, July 1984

Page 47

is, that all must be treated as equally possible and that once established, these rights unless a very compelling reason can be presented to why these rights should be removed. This premise is not always to be followed in all the wilderness areas and the BLM & Forest Service act. In magazine and newspaper articles, it seems, when mining is mentioned, the picture which is depicted, the picture shows large earthmoving equipment, huge open pits, and rarely is the other shown. We believe there is a reason for this. These people have virtually no impact on the environment whatsoever. They have been in the areas which have been declared wilderness and wild for many years in fact they have been there since the late 1800s. Those who wish to back the mining industry cannot fail to show these types of pictures since to do so would show that these people are no threat at all to the public lands.

Tens of thousands of people have been interested in recreational mining. Many of these people are small stream diggers whose rigs are just an error tubes or flotation devices. They come from all walks of life,

the rich, poor, young, the elderly, who have found the adventure and excitement of searching for gold and other public lands as much as anyone else. They have had their very first little digger that they have bought to be sure. And they are the countless rigs in their minds as they are in all other categories of land users. But the difference is that these rigs have been abandoned from their recreational pursuits in wilderness and wild and scenic areas.

These were conducted in the wild areas on the North Fork of the American River in Placer County, California by the California Department of Fish and Game, concerning surface dredging of watersheds of the environment. The Department, using a team of researchers, spent several days operating a dredge on the river. The dredge had caught in its mesh everything it dredges. Have known for years, we all know it is properly covered, there is no leaching effect on the environment. All signs of dredging operation disappear at the first writer's alarm which causes the river to flood on error tubes or flotation devices. Yet none of the rigs were open on the recreational tourist drive-

ger, even though he was there first. Let us use the North Fork of the American River as a further example. This area is situated in the heart of the gold country and was the scene of the 1849 gold rush. From that date until the 1970s, thousands died upon the banks of the river and mined Mining has continued in varying degrees until 1982 when the river was dredged and toxic. To qualify for the water rate as a river must be shown to be highly undisturbed by man and to have natural undisturbed nature. This is a hard standard to meet and agree to, that though it has been mined for over 150 years it still continued to be a beautiful river. It would then follow that

the river was doing no damage or very large proportion to the river. Yet it is not allowed there. The same will be true in the wilderness areas. Other kind users will have their freedom regardless of their adverse effects on the lands, but the river will not be allowed.

The recreational miner will not be granted the right to follow his pursuit on lands that are being taken. Why are you not these lands to be open for those who can't? His rights were not and are not now being considered by those who have studied themselves conservationists in their push to get public lands locked up. We believe this because they will lose none of their

rights, therefore they are not concerned about the rights of others. Mention miners and mining many of you do relate environmentalists and they will throw up their hands in horror. Miners because they do not know much about the small or recreational miner. They envision large strip mining areas with heavy equipment. They are even heard of and in most cases do no mining damage but they are. We believe it is time for the Congress to take a very close look at bills that lock up public lands and to weigh

Continued page 48

SUEPTATIONAL

Conservationists are at the focus in the light of reality. There are areas which do not need to be protected. All but a few million acres on the point. But not many millions of acres that are now being presented to the Congress. Most conservation groups say there is no other way to protect the lands. We think it is. Both the U.S. Forest Service and the Bureau of Land Management are fully understood and understood. These agencies, among others, are the agencies that own lands but we give them bills to work with. Miners may not always agree with the policies of these agencies concerning mining, but we do agree that we want to see the public lands taken care of. We want to agree with the industries to see our lands in such a way that will keep much of what we already have and will assure renewable lands for our future generations to whom we owe an obligation. We suggest that Congress start debating together a new public land management program that will include input from all

actions who use these lands.

We suggest that we need to get out of the business of restoring those lands which have been damaged by fire. An assessment of the loss of recreation can be seen near Auburn, California in Placer County. In 1981 a tragic fire burned thousands of acres of timber and brush. Today, almost 25 years later, large parts of this acreage is covered with scrub brush. There should have been replanted and we need our future generations will not see the beauty and resources that once existed here. This we feel is a much more positive plan than locking off lands for the law to enjoy.

Miners employ a "use it or lose it" philosophy. It is available that these lands which are being proposed for wilderness withdrawal will be hit by fire or some other calamity. If by fire, how then should we go about restoring these parcels? It is no results or mechanical equipment to be allowed. One can never repeat the earlier a short-term "do as you can't leave" these lands if we have done with so many other burned out lands. We need public education, not only

from government sources, but from all public land use organizations. Nothing will be done until that point. Those of us who use public lands must be willing to stand up and point the finger at those in our own groups and not mean that we will not tolerate enforcement of our property. Adults need to remember that children are the miners of us. What we do and accept in conduct is what they will do and accept.

We also suggest that those lands which have already been placed under Wilderness or the Wild Rivers Act be reopened to the recreational gold miner, including the auction dredger. This is not an activity which was taking place before the inclusion of these lands into either one of these acts. There can be no reason to exclude these people while enforcing other recreational users' rights.

We realize we have a conflicting commentary by the majority created miner and the river auction dredger. This is not to say that we do not see the plight of the small commercial miner and the larger mining operations. But the recreational miner

and auction dredger are having their lands striped from them without any recourse. They, too, have not to be heard and they number into the tens of thousands.

We are aware that there is a noise abater to remove the legitimate claim holder from his claim in cases that are being proposed for Wilderness and Wild Areas. This is often done by wildlife laws being performed on his claims which are so high a standard that he could not possibly pass the test. This too needs to be corrected and the miner needs protection under the law which were created for him. In summary, we agree that wilderness bills are not worthless. They do not present us with any logical scheme to protect these lands in case of man-made or natural disaster that, in fact, they tend to hinder such efforts.

While we agree that certain areas of all such laws are of great value that they need special protection, there do not fall up to the

millions of acres now being proposed for Wilderness and Wild Rivers inclusion. Some of these locations are so remote and steep in terrain that they are already given a natural protection which does not need a bill.

We believe that the recreational user now being proposed for these lands are equally as dangerous for the protected areas and no adequate measures are being taken to curb these activities. In our opinion, these lands if we have done with so many other burned out lands.

We need public education, not only

invited as to what the real problems are.

Our answer to the present environmental problems which have not in a better land management program, adequately funded, with public input from all sections of public land users, large and small.

We are often told by environmental groups that the public in the majority supports their actions. On such things as food, news, pollution and toxic waste we would agree with them. But

JUST PURCHASED

R. T. L. is in the process of dismantling this mill and is offering for sale, on site, the equipment listed below.

For further information call (209) 632-9073, and ask for Danny.

in the public land area. This is far from true. These groups are finding very little support in the courts and these wilderness areas is take place. They are finding little support in the people who actually use the lands, whether recreationally or commercially. We do not believe that those who live on the east coast can properly evaluate the problems that those who live in the mountains of the western states face.

There is a groundswell of rearmament mining from those who feel that they are being harassed but not given a fair hearing. It is a groundswell of rearmament mining that is starting to make full use of not only the local, but the national level. It is one that those in Washington, D.C. are starting to hear.

Environmentalists like to feel that their problems arise from Secretary of the Interior James Watt and not President Reagan. They feel that not that it is going and it is not getting out of office. Their problems will be solved that. But the public land user will not allow his public property to be continually locked off from him. Miners who used to explore mining as a land use are now in fact

realizing that the miner is a part of the American way and that he should have the right to remain so.

To say that those who mine do not care about the environment is completely false. The miner, probably more than anyone else, loves these lands. Because he lives there, he works there, and dreams there. He sees it during the heat of the summer when the fire danger is high. His three during the winter storms to waters what nature actually does under these conditions. He knows where to cause damage to the lands because he witnesses it. Thus, he possesses the real experience on the environment? The next time you thru through a magazine and pictures being presented of a clean out river enjoying it. Remember that this picture is in all likelihood being

staged. The owner is not peering to other sites, such as charmed brooks, meadows, delicate rocks and trees, and discarded trash.

The next time you see pictures being shown of mining, count how many pictures you see of large open pit mines, heavy earthmoving equipment and large processing mills. Then count how many pictures you see of an auction dredger user a permit a sluicer, or a "Man and Dog" based operation. Our guess is you will come for about the latter.

We simply ask for justice. We ask for what is the right of those who own these lands. We ask to be included in the decisions on the future of what our. The bill is being passed when we can be taken for granted so as to panoramic view, remember that this picture is in all likelihood being

ABED LABORATORIES, INC.
2437 - 6th STREET - BERKELEY, CA 94710
TELEPHONE 815-843-0567
CHEMISTS - ASSAYERS
ATOMIC ABSORPTION ANALYSIS
Umpire Assays

Thursday, March 15, 1939

Back country sanitation

Poor water habits by back-country travelers are blamed for the spread of a potentially serious bowel infection, particularly in Firefly Wilderness Area, and in the Big Horn Mountains.

Dr. H. C. Parich, of the state Division of Health and Medical Services, speculated the spread of giardiasis might be attributed to a growing number of cabins, back-porches and other recreational facilities of the way places.

The disease also has been reported in Colorado and Utah. He recommends healthy back country procedures.

PARICH explained that giardiasis is caused by an intestinal parasite that generally is transmitted through a water supply contaminated by the fecal material of humans or wild and domestic animals. The disease-causing parasite has been noted in both wilderness and municipal water supplies in the Rocky Mountain area.

"In my opinion, the increasing incidence of giardiasis is primarily the result of people becoming careless about their personal habits when they get off the beaten track," he said.

When an outdoor facility isn't immediately available, they relieve themselves where they happen to be, without giving much thought to the potential for spreading the disease, Parich said.

Parich said the presence of uncovered human feces and toilet paper and the droppings of domestic dogs immediately next to water supplies are often noted in remote areas.

"We know for a fact that small wild animals are exposed to the water material, in fact, they often use toilet paper to make their nests," he said. "These habits permit the parasite to be carried."

Animals are infected with the disease, leave their droppings near the water and the transmission cycle continues."

A complicating factor, he added, is the fact that humans sometimes can be infected with giardiasis without showing any symptoms.

"OF COURSE, these people, without even knowing it, can spread the disease, not only in the wilderness but also when they return home," he said.

Parich has shown that giardiasis can be caused by as few as 10 to 20 parasites (cysts). Symptoms of the disease include stomach diarrhea, nausea, abdominal cramps, bloating, weight loss, anemia and fatigue. Children are infected more frequently than adults. The carrier rate may range up to 50 percent of the total population in a given area.

Symptoms may occur from five to seven days after infection and can persist for weeks or months. Treatment involves removal of the parasite by appropriate chemotherapy.

Parich recommended two specific procedures that should be followed by back country travelers in order to curtail the spread of giardiasis.

— WHEN AN outdoor toilet facility is not available, human feces and toilet paper should be buried in a hole at least eight inches deep and more than 100 feet from the nearest water.

— TRAVELERS should, when possible, carry and use water distilled from an approved source. Untreated water should be boiled at least 20 minutes before being used. Water purification tablets are not effective against giardiasis.

RECEIVED

11

DEC 14 1988

12-12-88

DEPT. OF LAND MANAGEMENT

2000 SPRING, WYOMING

Dear Sir,

I lived in Teton as
a child and now live in London
I was exposed to
Oregon Butte and Sand Dunes
area and just can't remember
what you are want to
make it wilderness area

All you are doing
is putting the area off
limits to our elderly people
as they will not be able
to enjoy any of the land
that they fought and worked
so hard for every one get old
you say that people
will be able to backpack
into the area, this is not only
on this camp and that
would go out in the sand
like that off they did not

Responses to Letter 11

- The analyses for the Oregon Buttes and Sand Dunes WSAs show there would be a lower level of recreation use if these areas are designated wilderness. The elderly would be one of the groups who would use wilderness to a lesser extent than a nonwilderness area. In addition to the elderly, handicapped individuals and individuals with very young children would also use wilderness areas to a lesser extent.
- There may be confusion about the kinds of activities associated with backpacking. It may also include day long hikes. There are periods when it would not make good sense to go very far into the Sand Dunes but that does not mean it is never appropriate to venture into the area. We believe you are right in your statement that the Sand Dunes cannot be used to a great extent for several months of the year, however, the area may be used for more than 8 months. The period of time it can be used will depend to a great extent on the weather in any particular year.

know the area they could
not find water and if the
wells come up it would change
the form of the land and they
would get lost

11
2

As a land is would go
out in the woods and bring the
farmer home back but grandfather
know when to go and when to
get out. I have seen it when
a horse did not see want to
be in it.

You must have any track
in the area for the land is moving
all the time which covers up
your track.

This is only 3 to 4 months
that you can enjoy the area because
after that it is to fall and you
lose the spring and fall when
that comes up at any time. The
streams have taken their solid of
you suggest the area you would
know that so please buy it

as it is and don't tell
the people they can enjoy it
4 months or over a year and then
take some one off for the it
will be your job for this
death.

11

and would be oxygen
Both are for on my file
so you better know where to
write

We have the area and
some of us are to all on
land and to write in the land
take it away from all of us
I have had a copy of
the million digit statement
for a real a piece and to take it
land and some of the other people want
to see it.

Thank you
Walter Brown
330 S 7th
Fountain, Wyo
82520



Texas USA

PO Box 376
Denver CO 80206
4011 Broadway
Denver CO 80202

December 22, 1988

Re: Wilderness Suitability Study
Rock Springs District

Bureau of Land Management
Rock Springs District
P. O. Box 1809
Rock Springs, Wyoming 82902-2809

Attention: Mr. Al Stein
Planner

Ladies and Gentlemen:

With regard to the above captioned wilderness suitability study, Texaco would like to make the following comments:

1. Texaco is disappointed that the BLM has chosen to designate 105,347 acres to a land classification which will prohibit all future exploration and development opportunities of oil and gas. We are particularly concerned about the extent of wilderness designated in the Sand Dunes, Honeycomb Buttes and Raymond Mountain areas, all of which have significant oil and gas potential. It is important to recognize that Wyoming is a major energy producing state and that a significant portion of its tax base and general revenue comes from oil and gas activities. Given the current slump in Wyoming's economy, it hardly seems prudent to further curtail energy activities.

It is important that opportunities to explore for and develop new sources of oil and gas be provided which will allow the nation to achieve the goal of energy self-sufficiency. The United States, currently imports over 40 percent of its energy. However, oil and gas are nonrenewable resources in nature and once foreign supplies are depleted or otherwise unavailable, we will have to rely upon our own domestic reserves. Yet, the land base which is available for the possible discovery of domestic sources of energy and minerals is rapidly dwindling due to decisions by the Federal government which prohibit access for such activities.

Texaco has demonstrated in the past that it is possible to explore for and develop these resources without causing undue harm to sensitive surface values. In light of the demonstrated compatibility of oil and gas activities with other resource values and uses, we believe that it is unnecessary to close areas with high potential for energy resource from future development.

1

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Bureau of Land Management
December 22, 1988
Page 2

2. We would like to stress our support of the nonwilderness recommendations for the late Mountain, Alkali Draw, South Pinnacles, Alkali Basin-Sand Dunes, Red Lake and Whitstourne Creek Wilderness Study Areas because they contain significant reserves for oil and gas. However, we would also like to emphasize that companies currently holding leases cannot be forced to accept new restrictions or stipulations which exceed the original terms of their existing leases.
3. We strongly oppose the BLM's wilderness recommendations for Raymond Mountain, Buffalo Hump, Sand Dunes, Honeycomb Buttes, and Dragon Buttes Wilderness Study Area because they have significant potential for energy resources. We are particularly disturbed that all opportunities for oil and gas development in these areas will be lost forever once they are designated wilderness.
4. It is our view that Wyoming already contains more than enough designated wilderness. Just because all the wilderness is located on Forest Service lands is not sufficient justification for the BLM to recommend its lands for wilderness when important resources will be locked up in perpetuity. While we recognize that the BLM was directed by law to study its lands for wilderness suitability, it does not state that the BLM must recommend any of its lands for wilderness, specifically energy rich lands. To the contrary, it has been made clear in the BLM's wilderness study policy that oil and gas resources must be given adequate consideration during the decision-making process. It does not appear, however, that the BLM has adequately considered the energy and mineral potential of the five WSAs recommended for wilderness designation. The trade-off decisions reflected in the wilderness DEIS are such that valuable opportunities for development of oil and gas resources in these areas will be precluded forever.

Very truly yours,

LEASAC INC.

Terrence M. Beltz
Land Representative
Western Region

THE:clF
dec09tamb

cc: E. C. Burritt
J. K. Hendrickson

Responses to Letter 15

1. In the Revised Draft EIS, the impacts and tradeoffs that would occur if a WSA is designated wilderness are described. It states that if a WSA is designated wilderness, there would be a potential loss of oil and gas resources and in the opportunity to explore for oil and gas. BLM recognizes that oil and gas exploration and development can be compatible with many other resource uses. However, such activities are not compatible with wilderness. Consequently, a withdrawal from mineral leasing is part of wilderness designation.
2. Most existing oil and gas leases in the WSAs have expired. The WSA with the largest area covered by existing leases is the Alkali Draw WSA, which is not recommended as suitable for wilderness designation. The point you raise is not expected to result in undue restrictions on existing leases.
3. The Revised Draft EIS estimates oil and gas potential for each of the 13 WSAs. While some WSAs have a relatively high oil and gas potential, BLM believes that parts of the Sand Dunes, Buffalo Hump, and Honeycomb Buttes WSAs and all of the Raymond Mountain and Oregon Buttes WSAs, are suitable for wilderness designation. One of the main reasons the eastern portion of the Sand Dunes WSA was not recommended as suitable was because of the ongoing oil and gas development.
4. One important factor considered in arriving at the recommendations for wilderness suitability is: what a specific WSA would add to the wilderness preservation system. As you point out, all currently designated wilderness in Wyoming is on lands administered by the Forest Service. This factor did not contribute to the recommendations. The WSA which resembles the designated wilderness on National Forest System lands is the Raymond Mountain WSA. The rest of the areas recommended as suitable for wilderness designation contain lands that are very different from wilderness areas on National Forest System lands. These WSAs would add important elements to the National Wilderness Preservation System.

Oil and gas resources were considered in arriving at the recommendations. The potential number of wells in each WSA was estimated. This helped determine the tradeoff if the WSA was withdrawn from oil and gas leasing. While approximately half of the total acreage was recommended as suitable, the other half was recommended as unsuitable. As was pointed out in the Revised Draft EIS, virtually all of the oil and gas leases in the WSAs expired since the 1983 draft EIS. This and other factors resulted in changes to the wilderness suitability recommendations.



GUSTIN ENTERPRISES

Mining & Geologic Consulting
Geological Appraising

MELVIN E. GUSTIN ALICE L. GUSTIN
P. O. Box 488 - Rhinon, WY 82801 - (307) 565-3389

Comments concerning the Revised Draft of the Bureau of Land Management Wilderness Environmental Impact Statement for its Rock Springs District, Wyoming.

Submitted by: Melvin E. Gustin

January 2, 1988

In the 13 WSA, Lake Mtn, Raymond Mtn, Buffalo Hump, Head Dunes, Alkali Draw, South Flamingo, Alkali Basin Head Dunes, Bad Lala, Honeycomb Buttes, Oregon Buttes, Whitehorse Cr., Devils Playground, Twin Buttes, and Red Cr. Badlands, I find that all these areas have some of the same problems of no access and the miles involved of driving around the area just to reach the other side. I would like to know who is going to provide gas stations in these areas.

Wyoming has a very small population and a very small tourist trade. Most tourists are driving to main thoroughfares to Yellowstone Park. The access roads to these new proposed Wilderness areas are sub-standard to most tourists and off roads of the main flow to Yellowstone Park.

The problem of human element is not considered in the analysis of these areas. Just how many people want the experience of straggling across the open plain on foot with no drinking water in sight, facing winds that cut through you in summer and winter and at times throwing gravel at you at 30 mph.

How are people going to enjoy the outdoors knowing they may violate some rule or law. The freedom of individual rights of access and movement are being denied. There will be problems in the control of big game populations by the denial of access, and this is at a time the populations are at their highest historical level. The restrictions put on a wilderness area would prohibit the control of the wild horse populations with the use of helicopters and other motorized vehicles. The end result would drastically affect the ground cover and may devastate the game populations.

Wyoming people are more than a little upset with these proposed wilderness areas. It was promised by Congress that once the present Wilderness areas were implemented there would be no more wilderness in Wyoming. In this proposal the way Congress is going to go back on its word the people of Wyoming and the Nation.

page one of two

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Responses to Letter 18

- The WSAs recommended as suitable for wilderness designation do not contain roads or trails suitable for travel by most motorized vehicles at the present time. If they are designated wilderness and people have to travel around them, there would be no change from the existing situation. Local residents and most visitors to the State expect long distances between gas stations and other developed facilities where no towns are shown on the map.
- Wild horse gathering would take place outside the WSA boundaries under either wilderness or nonwilderness management. Wilderness management would not affect these activities. Therefore, wild horse numbers are not expected to change as a result of wilderness designation. If there is no change in wild horse numbers, there would be no impact to the vegetation resource.
- BLM recognizes the need to keep lands open for mineral exploration and development. The area recommended as suitable for wilderness designation is less than 2 percent of the public lands in the Rock Springs District. While the level of oil and gas exploration has been relatively low in the past several years, this has not been due to a lack of acreage open to leasing. It has apparently been due primarily to the relatively low price of oil.
- Pipelines and other linear facilities would have to avoid areas designated as wilderness. This is not expected to be a problem. At this time, there has been no indication that any other party is interested in using the railroad right-of-way for any other similar purpose.
- A discussion on water rights has been included in the Final EIS. The discussion of grazing management in the Final EIS has also been improved.
- BLM recognizes the State's interest in maintaining State lands for, among other purposes, generating revenue for the people of the State. The State of Wyoming is interested in exchanging lands in designated wilderness areas. The Revised Draft EIS points out this important point and assumes that the BLM and the State of Wyoming will be able to agree on an exchange. Wilderness is a national issue which is also in the national interest. This EIS analyzes the WSAs in the Rock Springs District to identify those that are suitable for wilderness designation.

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page two of two

The oversight of mineral potential in these areas are a great injustice to the security of the United States. Without an intense mineral exploration program in these areas, you don't know what is out there. I speak from over 20 years experience in the mineral exploration business. I know of several mineral ore deposits in these areas. The business of doing business is being hampered by inflicting wilderness in areas. This subjects private enterprise to costly delays and expensive studies and discourages investment opportunities.

Other overights may be the rerouting of pipe lines, powerlines, railroads and other access roads. The U.S. Steel railroad right-of-way might be utilized by other mining companies in the South Pass area for other productive opportunities.

Other questions not addressed are: How are the water laws going to effect your decision on wilderness? How are you going to control livestock grazing?

The state of Wyoming has state land in these areas and the people of Wyoming gave their opinion on this subject this summer: they want and expect free access to state lands. Please open your tunnel vision and include wide long range spectrum of this state and the Nation.

Sincerely,

Melvin E. Gustin

cc: The Honorable Alan Simpson
The Honorable Malcolm Willop
The Honorable Dick Cheney
The Honorable Mike Sullivan

Wind River Multiple Use Advocates

January 11, 1989

P.O. Box 1126, Riverton, Wyoming 82501

Alan Stein
Lock Springs District
Bureau of Land Management
P.O. Box 1049
Lock Springs, Wyoming 82912-1049

Dear Al,

First, thank you for coming and visiting with us in December. We found the meeting to be very informative. We also thank the BLM for holding a hearing in Lander. We appreciate your recognizing the level of public interest that exists in this area concerning the proposed wilderness recommendations.

Enclosed are written comments concerning the Revised Draft of the Lock Springs District Wilderness EIS. Should you have any questions about these comments, please contact me.

Thanks again for your considerate treatment of public comment concerning this draft EIS.

Sincerely yours,
Wind River Multiple Use Advocates

George Sappala
by George Sappala, president

25

Responses to Letter 25

1. Comments on the Revised Draft EIS demonstrate there are many people, both locally and nationally, who support wilderness. They also demonstrate there are 2 categories of individuals and organizations who oppose wilderness designation: (1) those who want to use a WSA for recreation and who feel that wilderness designation will adversely affect options for using the area, and (2) those who feel that wilderness designation will close the door to economic opportunities that are available under multiple use management.

Wilderness was developed by Congress as a nationwide program. The responsibility for designating public lands as wilderness was retained by Congress. While local people are more affected by wilderness designation, the views of nonresidents must be considered. The survey discussed in the Revised Draft EIS is relatively old. The timing of the previous survey, during a period of relatively high oil and gas activity, indicates there may be differences in the percentages of Wyoming residents feeling one way or the other. The acreage available for oil and gas leasing is not what is making today's level of oil and gas activity lower than 8 or 9 years ago. The lower level of oil and gas activity is due primarily to lower prices.

2. Access Control - The BLM will develop management plans for designated wilderness areas. Access control would be a component of the plan. There would be improved signing and public information, as well as increased patrolling to ensure the public is aware of the limitation on the use of motorized vehicles. Fencing the entire perimeter is not likely. However, additional fencing may be used where motorized vehicle access is most likely. When the public is more aware of the restrictions, BLM believes the instances of violations will be minimized.
3. Recreational Use and Economic Impacts - Part of the sand dunes will continue to be open to OHV recreation. On most other public lands, motorized vehicles are limited to existing roads and trails. Most public lands would be open to snowmobile use, except where wildlife would be harassed. Most of this type of use is by local residents who use areas outside the WSAs. There is no indication that any individuals would sell OHVs or not buy one if any WSA is designated. It is unlikely there would be fewer days spent in OHV recreation if all the WSAs recommended are designated. Therefore, BLM does not believe there would be a significant economic impact associated with a reduced potential for OHV use. There may be beneficial economic impacts because some nonlocal people may spend additional time in local towns while visiting wilderness areas.

25

Comments concerning the Revised Draft of the [Bureau of Land Management] Wilderness Environmental Impact Statement for the Lock Springs District, Wyoming

submitted by Wind River Multiple Use Advocates
P.O. Box 1126, Riverton, Wyoming 82501, phone (307)756-6931
January 13, 1989

The Wind River Multiple Use Advocates is a group of more than 250 users of federally controlled lands in western Wyoming. Included in our group are the full range of multiple users -- from recreationalists to miners, from hunters to timber harvesters, and all types of users in between. Our comments are based on our on-the-field experience and observations and our study of the land/resource use issues. Our goal is to find win-win solutions -- solutions which both protect the environment and allow responsible human use of the wondrous beauty of the rest of nature.

We are alarmed by the expansion of wilderness designation recommendations between the 1983 Draft EIS and the Revised Draft. The recommendations in the Revised Draft are even more extensive. We are concerned with the recommendation to permanently enclose some 187 square miles of public lands from multiple use. We are especially concerned considering the large percentage of the State of Wyoming already designated as wilderness and considering the ability of the Bureau of Land Management to use less drastic regulations to safeguard the environmental quality of these areas.

1. General Observations

1. The EIS appears to have ignored its own findings concerning public attitudes towards the designation of more wilderness. As indicated by the Opinion Research Corporation study referred to on page 155, the majority of Wyoming citizens believe ENOUGH IS ENOUGH -- that Wyoming already has enough designated wilderness. But the BLM, in this Revised Draft, chose to ignore the people of Wyoming. Rather, the EIS selected to move towards recommending as much acreage as possible for wilderness designation, taking a position supported by only 14 percent of Wyoming voters who responded to a survey conducted by U.S. Congressman Dick Cheney.

The Revised Draft says, "Careful consideration of public attitudes and values should be an integral part of any wilderness study." We see little sign that the majority opinion of Wyoming citizens were either given "careful consideration" or that it was made an "integral part" of the study.

The Revised Draft also says, "Public attitudes seem in favor a hard look by BLM before proposed wilderness designation." We do not see where this hard look was taken by the BLM. Some of the indications which we believe show this lack of taking a hard look are:

A. ACCESS CONTROL

Restrictions of motorized access will be extremely difficult in most areas involving wilderness recommendation. We seriously doubt that motorized access can be successfully restricted without extensive and expensive active and passive control measures.

2. It appears that the Revised Draft ignored this access control problem, preferring instead to assume that every one will politely respect the artificial boundaries of the wilderness recommendations.

The Revised Draft is deficient in not acknowledging the access control problem that will be created by wilderness designation, and specifying the

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nature and expense of required control methods -- he they the construction of partner fencing or the employment of law enforcement personnel to patrol the designated areas.

No area should be recommended for wilderness designation without adequate analysis of potential access control requirements and expense.

B. POTENTIAL RECREATIONAL USE AND ECONOMIC IMPACTS

We believe the analysis of recreational use is unrealistic, and economic loss from reduced potential motorized recreational use was exaggerated. Much has been said and written in the past several years for the need to provide recreational opportunities for the American public, including the growing population of senior citizens, the handicapped and the youth. Even though the cultural research has indicated that people actively prefer easily accessible recreational opportunities. An extremely small portion of the general population seeks out wilderness recreational opportunities.

Further, unneeded related recreation provides greater potential for economic development than does wilderness recreation. This is of particular importance in Wyoming in striving to diversify its economy by developing its outdoor recreational opportunities.

No area should be recommended for wilderness designation without a more adequate analysis of the potential differences between the demands for motorized and non-motorized recreational opportunities, and the potential economic impacts between these differences.

C. EFFECTS ON WILDLIFE

The Revised Draft makes the fallacious assumption that wildlife populations will be adversely affected by motorized access and/or oil and gas exploration and development. While this is currently a popular assumption, it is not supported by historical facts. In spite of the increase in human activities in Wyoming since the mid-1930s, comparisons of Wyoming State Game and Fish population estimates show dramatic increases between 1930 and 1965. Estimated populations of elk have increased by 76 percent, of deer by 1305 percent and of antelope by 999 percent. In actuality, wilderness designation and wild horse gathering will be detrimental to wildlife. This is true to the extent that wilderness designation prevents: (a) wildlife habitat improvement projects, and (b) use of effective wildlife population management techniques.

Also, we could find no mention of "wild" horses and the effect of wilderness designation upon their management.

No area should be recommended for wilderness designation without a more realistic analysis of the effect of such designation on wildlife populations. Further, an analysis should be made of the relative economic impacts between motorized and non-motorized hunting of wildlife.

D. EXPANSION LOGIC

The logic which appears to have been used to expand the recommendations appears to be faulty in not understanding the Revised Draft, the logic in 1983 have expired without being renewed.

We consider this logic faulty because it overlooks the fact that the oil/gas industry has been in a depressed condition during the intervening years. The fact that the Latham lease exploration program has not renewed oil/gas potential. Rather, it has more to do with this depressed condition and the inclusion of the leases in or adjacent to wilderness study areas.

It should be pointed out that twenty years ago that we were generally considered devoid of oil and gas potential. Advancing technology and synthetic drilling has proved very successful in the past few years. While we are not predicting that the Overbank Salt experience will be repeated in the proposed wilderness areas, we are, however, concerned that the expanded wilderness proposal will preclude the expansion of these areas. Exploration alone will prove whether the potential exists.

- Effects on Wildlife - Some wildlife numbers increased since the 1930s. Many studies have shown that wildlife, especially big game, avoid areas where there is human activity in a previously undisturbed area. The Revised Draft EIS does not say there would be a change in total wildlife numbers. However, if a WSA has oil and gas activity, big game would avoid the area during construction and drilling. They may move back into the area during operation, if a well is a producer.

If a WSA is designated wilderness, the options for habitat improvement would be reduced but habitat improvement consistent with wilderness management could still take place. There is no information to support an assumption that wildlife populations would be adversely affected by wilderness designation.

Wild horse gathering is not anticipated in any WSA under either wilderness or nonwilderness management.

- Expansion Logic - The acreage recommended as suitable for wilderness designation was not increased because BLM believes the WSAs have a lower oil and gas potential. It was increased because there are no longer existing oil and gas leases in the WSAs. When those leases were in effect, they had the potential for causing impacts which would adversely affect the wilderness characteristics of the WSA. This made the WSA less suitable for wilderness designation. Now that leases have expired, and the potential for adverse impacts to wilderness characteristics have been eliminated, the WSAs are suitable for wilderness designation. The potential oil and gas resources foregone and the potential value of those resources are estimated in the Final EIS (see response to Amoco Production Company, 448).

- Inholdings - The Final EIS was changed with regard to exchanges of State and private lands. It points out where these lands would be included in designated wilderness areas in the event they are acquired. This is not part of an alternative, but is an added component. Under wilderness designation, an exchange would be pursued. If an exchange cannot be consummated, the wilderness area would be managed with the inholding. The rights of the landowner would not be affected. An inholding does not necessarily make an area unmanageable as wilderness.

- Sand Dunes and Buffalo Hump - Restrictions on motorized vehicle use in wilderness areas help preserve the area's natural character. Part of the natural character includes solitude. The BLM recognizes that activities such as motorized vehicle use and oil and gas activity can be compatible with other resources (e.g., wildlife, livestock, and air and water quality); however, such uses are not compatible with wilderness values.

To make a judgment based on currently depressed economic conditions, we believe, is actually shortsighted. It does not take into account the potential for future shortages of oil and gas resources. And it completely ignores the national need, for internal security and economic reasons, to reduce the country's dependence on foreign oil and gas sources.

In addition, the reserve estimates presented throughout the Revised Draft appear highly questionable. As example, on page 21, an estimate of 39 BCF of gas is presented for the 34,456 acres in the Kaywood Mountain WSA. Without explanation, the very same reserve presents numbers which calculate potential reserves at 146 BCF. Generally, the estimates of gas and oil potential for the WSA are only about 30 percent of the average estimated potential for adjacent areas.

The Revised Draft gives no explanation of this variance.

The oil/gas reserve estimates appear to be based on some sort of average of proven reserves and potential reserves. The average of these two figures is a very low reserve number averaged with a larger incidence of exploration which resulted in more proven reserves. If all potential formations have been tested, such an average would be a more conservative estimate with some useful results. It is not at all useful when it is used to estimate the potential of untested areas. The Revised Draft study areas covered by the Revised Draft.

The reserve estimates presented throughout the Revised Draft seem designed to down play the potential of the various study areas. Further, the presentation of the comments "reserves" is done in such a way that it implies a totally false impression of the reserve estimates.

No area should be recommended for wilderness designation without a more realistic analysis of the wilderness opportunity for oil and gas development and the potential adverse effect on the loss of such opportunity on the economy and national security of the nation.

E. INHOLDINGS

The Revised Draft very conveniently belittles the importance of both State of Wyoming and private inholdings within the current land program of wilderness. The Revised Draft rather casually explains this as asking it to be for analysis and suggesting that such inholdings would be eventually eliminated by land exchanges.

But the Revised Draft does not detail how such land exchanges will take place or the potential impact of such exchanges on the current land program.

No area containing inholdings should be recommended for wilderness designation until proposed land exchanges are detailed and the potential impact on current owners analyzed.

2. Inholdings above have been made to economics. Does any statistic this as an indication that we are only selfishly interested in the "mighty buck." But our concern over economic are far greater. We do realize and appreciate the many values in our great outdoors which create a great deal of money. Many of us have chosen to live in this area in full knowledge that such undoubtedly make a substantial portion of our own personal income. But we remain here because of the outdoor opportunities of the area. We don't face it -- human activities are greater than ever before by economics. It becomes a question of whether the area is worth paying this possibly could be found elsewhere also, to allow us to leave there. It becomes a question of our children and grandchildren and grandchildren to be in the area so they won't have to leave the state to support themselves. It becomes a question of whether our lives are worth the cost of the money we have to pay to maintain adequate basic public services.

Without adequate economic use of the natural resources, our chosen lifestyles will be destroyed and our children and grandchildren will be denied even the opportunity to chose the same lifestyles. We have already witnessed such destruction -- due solely to excessive "protection" of the environment --



Sponsored by One-Shot Antelope Club

Box 95, Leader, Wyoming 82530

December 30, 1988

Alan Stein
Rock Springs District
Bureau of Land Management
P. O. Box 1169
Rock Springs, WY 82901-1169

Gentlemen:

As president of the One Shot Antelope Club I have been instructed by the Board of Directors to write to the BLM concerning the proposed wilderness areas in the Oregon Buttes, Sand Dunes and Honeycomb Buttes areas in Fremont and Southeastern County, Wyoming.

Supported by the One Shot Antelope Club and the West Shooters organization, one of our associate organizations (the Water for Wildlife Foundation), has in the past and plans to do so in the future spend considerable money and time in developing resources for better wildlife habitat, mainly through water development. There have been several projects completed in the general area of the proposed wilderness areas. All projects completed by the Water for Wildlife Foundation are for the good of wildlife, livestock and the general public.

It is the consensus of the One Shot Antelope Club Board that if these proposed wilderness areas are designated a large part of the general public will no longer be able to enjoy and use the affected lands.

Why should this land be limited to just hikers or possibly a few horse-back riders? What happens to the older people and the disabled? These people should have their rights protected.

The One Shot Antelope Hunt will be celebrating their fiftieth anniversary in 1990. Over these years many past shooters have returned to Wyoming annually to Hunt and enjoy other outdoor activities offered to them by the Friends and open spaces of Wyoming. We feel these wilderness areas will affect some of these hunters in the future.

Responses to Letter 59

1. Wilderness designation will limit the kinds of habitat improvement that could occur in an area. However, improvement with similar benefits can generally be undertaken in areas near the WSAs.
2. Wilderness and dispersed, nonmotorized recreation are legitimate uses of the public lands and are an integral part of multiple use management. The WSAs recommended for designation constitute less than 2 percent of the public land in the Rock Springs District.

Page Two.....Alan Stein...December 30, 1988

Our relationship with the BLM has been very successful and we appreciate their cooperation in putting on our hunt each year. However, we felt these comments should be made to the BLM expressing our concern over the affect the wilderness area may have in our annual hunt, our county and our state.

We thank you for this opportunity to express our views.

Bill Guetin
Bill Guetin
President

cc:
Governor Mike Sullivan
Rep. Dick Cheney
Sen. Malcolm Mitchell
Mr. Al Simpson

January 18, 1989

Allan Stein
Rock Springs District
Bureau of Land Management
P. O. Box 1259
Rock Springs, Wyoming 82901

Repecting: Revised Draft - Rock Springs District
Wilderness Environmental Impact Statement

Dear Mr. Steini:

Please accept the following written statement regarding the Revised Draft EIS for the record.

I strongly object to the Wilderness Act of September 8, 1964 as a discriminatory Act against the people of the United States that are elderly and disabled. The Wilderness Act closes areas of our nation to the enjoyment of the majority in favor of the few who are in good physical condition and can walk or ride horses into the wilderness areas. The rest of the people are being discriminated against.

I believe that all of the areas in the Revised Draft EIS should be recommended for No Wilderness-No Action designation. We already have millions of acres of our public lands designated as Wilderness, Parks, Recreation Areas, Historic Sites and Wildlife Refuges.

BUFFALO HORN WSA, SAND DUNES WSA, ALKALI DRAW WSA, SOUTH PINNACLES WSA, ALKALI BASIN-BENT SAND DUNES WSA, RED LAKE WSA, HONEYCOMB BUTTES WSA, OREGON BUTTES WSA and WINTERGISE CREEK WSA -- I would like to comment on all of these areas as one, as they are all within the same general area. Of the 149,760 acres that was studied in this area, 70,890 are being recommended for Wilderness designation. There are numerous roads into all of these areas. They may not be graded roads, but they have been used for over fifty years, that I know of personally. This alone should disqualify these areas as Wilderness. According to the BLM studies of the areas, there are thirteen two-track trails and two seismograph trails into the Oregon Buttes area there are vehicle ways into the Honeycomb Buttes area, South Pinnacles, Alkali Basin, Red Lakes and Whitehorse Creeks. There are numerous roads leading into the Sand Dunes area. According to the BLM studies, it would be difficult to control any of these areas.

I own mining claims near the Oregon Buttes and someday hope to mine in the area. As far as a natural land mark, none of the Oregon Buttes have been used for a land mark for many years and will continue to be used as such as long as nature

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Responses to Letter 62

- The Wilderness Act of 1964 was passed to set aside areas which are currently undisturbed and have wilderness character, for the enjoyment of current and future generations. While the restrictions on motorized vehicle travel may limit opportunities for some individuals to visit the areas, wilderness areas meet the needs of other citizens. BLM does not believe that setting aside 2 percent of the public land in the Rock Springs District as wilderness discriminates against those who cannot use wilderness areas. Most of the areas recommended as suitable for wilderness designation are very different than the areas previously designated as wilderness in Wyoming.
- The wilderness inventory does not support the view that existing trails in the WSAs recommended as suitable for wilderness designation make them unsuitable for designation.
- Wilderness designation would not result in a rise in grazing fees. However, there may be some increase in the cost of operating in a wilderness area.
- The effects of motorized vehicles are generally erased quickly on dunes with no vegetation in the Sand Dunes WSA. However, on partially stabilized dunes, the effects are more long-lasting. The effects of motorized vehicles on the many ponds are also more long-lasting and detrimental to the wildlife that inhabit the ponds. While many users are courteous and careful, others are not. The elk herd is not the primary reason for the suitable recommendation for the Sand Dunes WSA. It is an important supplemental value.
- Some constructed improvement in WSAs include water developments. In most cases, these do not make the WSA unsuitable for wilderness designation. The Final EIS provides a better description of how existing and potential future developments of this type would be handled under wilderness and nonwilderness management.
- As wilderness suitability is defined, there is no prohibition against structures of any kind which precludes a WSA from being considered suitable for designation. In the Raymond Mountain WSA, the evidence of human presence does not predominate and the area is essentially in a natural condition.
- The 2 percent figure for public lands does not take into account the acreage in wildlife refuges, historic monuments, designated landmarks, national parks, national forests, and other specially designated areas. Some of these areas are open for other activities. For example, national forests are open to multiple use. Public lands are generally open to multiple use. Restrictions on use are greater in some places than in others.

allows. This area is more important to our economic structure than anything else. The wildlife in the area is very adaptable. If there are only 60 acres of surface disturbance with nine wells producing, this will have very little affect on the wildlife. Very few people would use this area for recreation if it is designated wilderness, as the area is vast, and the majority of the people would prefer to drive to the areas that they have been using for rock hounding and hunting. This area, as all of the other WSA in this group, is already being used by man for recreation, oil and gas production, grazing of livestock and mining. As multi-use, the land is of value to the most people, and because it is already being managed by the BLM, there are rules and regulations that are already being followed to preserve the land.

The Honeycomb Buttes area is of the greatest value to the ranchers. It is an area that is being used for grazing. The grazing fees have just been raised again and if this area is put into Wilderness, the fees would be raised even higher. If the trend of government price increases in protected areas is anything to go by, the ranchers are having a hard enough time paying these fees as they are. Wilderness designation of this area would place an unfair burden on the ranchers that use it. If there will be 66 wells in the area, we need to keep it for multi-use. Our economy is energy based and we need to keep that in mind when we are studying these areas.

The Sand Dunes WSA is presently being used for production of oil and gas. This area has added to the recreational enjoyment of a lot of people from Rock Springs, Farrow, Bonen and Green River, as it is close enough to enjoy almost anything. The best thing about the area that the Sand Dunes are self-preserving, man's use of the land is erased by the wind. As to the desert elk herd in the area, this herd should not really be a factor in deciding Wilderness designation, as the unique desert elk herd that is talked about was transposed into the area. Again, this is man's work, not nature's. The elk have adapted well to the area, but they definitely do not attract the attention of the Sand Dunes area, as they can be found ranging throughout the whole area. Also, the elk herd had to be fed at different times, to keep them out of the farmer's hay in Bone Valley, and to keep them from starving in bad years. Designating this area as Wilderness would not keep the elk. There were a few elk in the region before this herd was brought in, but they would mostly stay in the mountains and move into the lower regions during rough winters. There are already rules and regulations to protect the elk, and if they are not harassed, they will get along just fine. The Sand Dunes should be left under multi-use so that more people can get

greater benefits from use of the land. Solitude can still be found almost anywhere in Wyoming. After all, we only need about five people to the square mile and most of the people in the state live in the cities. Most of the time it is easy to find solitude. Hiking in this area would take a lot of endurance, and would be very dangerous if a storm should blow in. Also, anyone not knowing the area should not be hiking around in it by themselves. This has always been an area that was used by off-road vehicles, and so far it has not displaced all other users, and I don't think that will change much in the future. Telling people that they can not use the Sand Dunes for their off-road vehicles is somewhat like telling someone living on a large lake that they cannot use the lake for boating. It is a good place to take the off-road vehicles as they do not damage the landscape.

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Buffalo Hump has always been looked on as part of the Sand Dune area. The same objections apply to this WSA. Why take an area that is doing very well under multi-use management and put it into Wilderness? All that does is eliminate possibilities for the area. According to the BLM BLS, there are five two-track ways and one semicircular line in the area, plus a tract of sand fence and two recently dug livestock pits. Even though these areas will eventually grow over, I think that with the other factors considered, this area is also unsuitable for Wilderness designation.

From what I gather from the BLM BLS, Alkali Draw WSA, South Pinnacles WSA, Alkali Basin-East Sand Dunes WSA, Red Lake WSA and Whitehorse Creek WSA have already been found unsuitable for recommendation as Wilderness. Therefore, I will not comment on these areas in this statement.

One other consideration as to suitability is that this area has been under BLM management for a lot of years, and there have been efforts made to improve conditions in the area. These are man-made improvements and although they do not designate the landscape, they definitely exist. In 1966, I helped build fifty-five ramways in the area. There are seven that I know of that hold water now. The rest of them, I believe, are dry. Almost all of the water holes in the area were built by man. This area is not a true Wilderness area when all factors are considered. Also, when callrocks have to be removed from an area so that it will qualify for Wilderness designation, I think we are taking things a little far.

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RAYMOND MOUNTAIN WSA - The BLM study shows that there are man-made structures in this area. This does not fit in with the definition of Wilderness. There is a communication site, dry well, and a road to private land that penetrates the WSA. There are, according to the study, several vehicle

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ways and evidence of livestock trailing. These factors should have already disqualified this area for Wilderness. Just north of this area there is already a Wilderness Area, and I can see no reason to add additional acreage, that is not suitable, just for the sake of having lands administered by the BLM (and not one of the other agencies) in Wilderness designation.

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LAKE MOUNTAIN WSA, DEVIL'S PLAYGROUND-TWIN BUTTES WSA AND RED CREEK BASLANDS WSA - have already recommended as unsuitable for Wilderness by the BLM study. Therefore, again I will not comment on these areas at this time.

Some general notes about Wilderness Areas. We need a balance between economy and conservation to make the best use of our public lands. If you would take a few hours, because it would take that, you would be able to see that we have already designated millions of acres for conservation purposes. Don't just look at those designated Wilderness Areas. Look at the protected forests, parks (state and national), wildlife preserves, historic monuments, recreation sites, and other designated land marks. It was mentioned that the land recommended by the BLM for Wilderness designation was less than two percent (2%) of the public lands, and that wasn't much to give up. Well, take a closer look. We have over one quarter of public land (according to the figures that I could find that showed how much acreage was used) already set aside for conservation type projects in the State of Wyoming. Another comment that was made was "the land proposed for wilderness designation by the BLM is insignificant in size and equal to about five drops of water in a large bucket"--sorry people, the bucket is over a quarter of the way full and maybe even more than that.

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I have made a few changes and corrections in the transcript that you sent me of my comments at the public meeting held in Buck Springs. I am submitting it with this statement for the record.

Yours truly,
Gerald Stout
 Gerald Stout
 Person, Wyoming


CELSIUS ENERGY COMPANY

131 SOUTH STATE STREET • P.O. BOX 1859 • ROCK SPRINGS, WY 82802 • PHONE (307) 326-2800

January 18, 1989

 Mr. Al Stein, Planner
 Rock Springs District
 Bureau of Land Management
 P.O. Box 1859
 Rock Springs, WY 82802-1859

Gentlemen and Ladies:

 Re: Revised Draft Environmental Impact Statement
 (Wilderness Suitability Study)

The Rock Springs District of the BLM has released a Revised Draft Environmental Impact Statement which addresses the suitability or non-suitability of 13 Wilderness Study Areas. We appreciate the opportunity to address one of those, the Lake Mountain Area.

We have substantial oil and gas knowledge about the Lake Mountain WSA. We believe it has high oil and gas potential. There are many pre-FLPMA leases which could be subject to applicable surface protection restrictions if the area is put into wilderness. If surface protection restrictions are imposed, they should favor oil and gas exploration and most importantly should be consistent with the oil and gas leases in effect. We believe the Area is acceptable to new drilling and that this Area should not be included in the wilderness designation.

In addition, the Rock Creek Wildlife ACEC should not, in our opinion, be classified for NSO stipulations.

Respectfully submitted,

Very truly yours,

 Roland J. Gill, Jr.
 Managing Attorney

pf

cc: B. L. Nordahl

Responses to Letter 63

1. The Lake Mountain WSA has a high oil and gas potential. However, there are only 600 acres of pre-FLPMA leases in the WSA. The recently completed Resource Management Plan (RMP) for the Pinedale Resource Area identified the area as being crucial winter range for the last naturally wintering herd of elk in this part of Wyoming. Further study is needed to identify the extent and location of the crucial winter range. The objective in the RMP is to ensure that the crucial winter range is protected. New oil and gas leases in the crucial winter range area will be conditioned to prevent disturbance to this important winter range.
2. Oil and gas leases in the Rock Creek ACEC will contain an NSO stipulation to minimize disturbance in the Rock Creek drainage. Rock Creek contains a pure strain of a sensitive trout species. The presence of this species was one of the factors that led to the designation of the ACEC. The NSO stipulation is an important aspect of ACEC management. BLM believes that any disturbance within the drainage may adversely affect the drainage, the stream, the trout, and water quality.

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**WYOMING CHAPTER
 SIERRA CLUB**

 District Manager
 BLM Rock Springs District
 P.O. Box 1859
 Rock Springs, WY 82802

January 18, 1989

Dear Sir:

Please include the following comments from Wyoming Chapter Sierra Club as part of the official record regarding the wilderness recommendations for BLM lands in the Rock Springs District. We appreciate the opportunity to comment on this important resource decision.

While WSCC commends the BLM for its recommendations to add Bayaud Mountain, Oregon Buttes, Sand Dunes, part of Honeycomb Buttes and Buffalo Bump. These are important areas to be designated as representative of the unique desert ecology of Wyoming.

The Sierra Club membership is made up of hundreds of thousands of people nationwide who regularly spend their free time recreating on public lands in the West. With the increasing use of wilderness areas in this country, it is important that Federal land management agencies recognize the value of wilderness areas in their management plans.

In order to address the future wilderness needs of this nation, WSCC suggests that the following areas be added to the wilderness recommendation from the Rock Springs District. Devil's Playground/Twin Buttes is a fascinating area of rugged badlands that is known for its extreme solitude, wildlife habitat, fossils and artifacts. Heliotrope Creek, while only 4000 acres would be a welcome augmentation of the Oregon Buttes/Continental Peak/Honeycomb Buttes wilderness study areas. I have been through this area and found that western edge of the Heath Formation that continues east to the Honeycomb one of the most outstanding areas of the Bad Desert. Lake Mountain in the Wyoming Range is important wildlife habitat for elk, deer, moose, and provides winter range for the big game species as well. As the Wyoming Game and Fish Dept. has expressed to the public, winter range is the limiting factor of wildlife populations. Akali Basin/East Sand Dunes and Akali Draw again offers important wildlife habitat, only this winter range is in an area where less range is available to the big game species because of the degradation of the area. Red Lake and Pinnacles while low in profile and not known for their spectacular scenery, they were considered for wilderness because of the quality for solitude they offer. These are the types of areas enjoyed by recreationists and educational courses from National Outdoor Leadership School (NOLS), Teton Science School, University of Wyoming and Central Wyoming College. The BLM has the responsibility to provide the wilderness areas demanded by the education, recreation and tourist interests in this country. Since we are proposing a special management classification for the Great Divide Basin, we urge you to reexamine the above listed areas for wilderness and manage other roadless areas as ACEC. We would be glad to discuss this further.

 Sincerely,

Howard H. Taylor

Response to Letter 64

BLM believes these areas are not suitable for wilderness designation for the reasons described in the Final EIS. BLM would be glad to work with any of the educational groups you mentioned to foster environmental education. This may include establishing special management or study areas in some of the WSAs not recommended for designation.

We stand opposition to progress, but opposition to blind progress.

January 20, 1989

RE: Honeycomb Buttes WSA
Oregon Buttes WSA
Whitehorse Creek WSA

Dear Mr. Stettin:

This letter is to state my total opposition to including the above noted areas into the wilderness system.

1 This area is divided into 3 separate areas for a very simple reason which, in itself, should exclude it from consideration. The Honeycomb Buttes WSA and the Oregon Buttes WSA are divided by a major North-South county road which is maintained by Fremont and Deschutes counties. The boundaries of the two areas are the sides of this road. The Oregon Buttes WSA and the Whitehorse Creek WSA are divided by a strip of deadland and a well used East-West road, which, again, is the boundary. The BLM gave around this by stating it gives them the option of accepting any one or all of the areas.

2 In the 1960's and 70's these areas, as were all BLM lands, were staked and oversteaked with mining claims. There are many validation drill holes, cost pits, etc., as well as many rut/trail roads throughout the area used by the claim owners.

3 In addition to the mining claim work, the area has been covered by oil and gas seismographic crews which left a number of "roads", some of which are still in use and others washed out but still a visible scar to the landscape.

4 The BLM is, in fact, one of the despoilers of the very lands they now say are "untouched by man". They construct stock/water storage reservoirs, and so called "grazing permit fences". As a last resort in the Oregon Buttes WSA they erected a large (informative?) sign about the Buttes on top of a ridge, visible for many miles, about 300 yards from the county road in the very lands they now contend are "wilderness" and promote the use of a vehicle just to read the sign and view the Oregon Buttes.

5 The BLM also states that by placing these areas in wilderness the desert elk herd would increase, while at the same time they will continue to allow the same amount of livestock grazing. The best way to allow the elk herd to increase is to control the grazing leases, which, in many cases are overgrazed, and let the wildlife have full use of the area. Just by declaring an area a wilderness does not insure an increase in wildlife.

Page 2

WSA

5 In fact, all of the above noted areas are bounded by well traveled roads and encircled by other trails, rut roads, etc. It will be almost impossible, short of a people, vehicle and animal proof fence around the areas to keep vehicles out.

In appendix A of the EIS the BLM has tried, through a lot of words and coverup statements, to avoid admitting that by their own studies most of the people of Wyoming do not want any more wilderness.

Instead, they have proceeded over the last 8+ years, and at a cost that I'm sure would be shocking if the amount were known, to come up with some areas that they could force upon the public as wilderness regardless of their true worth as wilderness areas.

6 I think it is time for the BLM to forget about making wilderness areas and get back to the job they are supposed to do, which is managing the public lands for all of the public, not just a few elite groups of backpackers, etc.

Sincerely,

Willard D. Aten

Willard Aten

Willard D. Aten
843 N. Lana
Lander, WY 82520

Responses to Letter 66

1. During the inventory process, the Honeycomb Buttes, Oregon Buttes, and Whitehorse Creek WSAs were identified as areas each having independent value to be considered for wilderness designation. It is not unusual for areas on either side of an existing road to have similar characteristics. Some WSAs have a road which is cherrystemmed outside the WSA boundary. This means it is not part of the WSA. When the effects of wilderness designation are analyzed, the effects of this road are taken into account. Generally, a cherrystemmed road or a parcel of private land, can be located inside a wilderness area without a great deal of adverse impacts to the wilderness character. While the 3 WSAs are identified in the inventory as separate areas, they could also be viewed as a single area with some nonconforming uses.
2. The Revised Draft EIS contains information on the naturalness of the WSAs. The 3 WSAs you discuss in your comments remain in a natural condition. Previous mining activity and seismic work have not resulted in permanent effects to the naturalness of the area.
3. The discussion of grazing management under both wilderness and nonwilderness management was modified in the Final EIS. If these areas are designated wilderness, any range improvements would have to meet nonimpairment standards for wilderness. Any additional signing would also take nonimpairment standards into account.
4. In the Revised Draft EIS, we said grazing management would not change. This meant that grazing management would not change as a result of wilderness designation. If resource conditions indicate that a change in grazing management is needed, it would be evaluated whether or not the area is designated wilderness. At this time, resource conditions do not point to a need to eliminate livestock grazing, as you suggest.
5. Roads provide clear, identifiable boundaries for WSAs and wilderness areas. If a WSA is designated wilderness, BLM would prepare a wilderness management plan which would include signing, public education, and patrolling. In most cases, if an area is not designated wilderness, motorized vehicles would be limited to existing roads and trails. Therefore, under non-wilderness management, the problem of enforcing restrictions on motorized vehicles would be similar to what could be expected if the area were designated wilderness.
6. Wilderness is a part of multiple use management. Only a small portion of the public lands would be managed as wilderness.

FRANZ J. CAMENZIND, Ph.D.

Wildlife Films/Photography/Research

4141 Main
Rock Springs District
Bureau of Land Management
P.O. Box 1848
Rock Springs, Wyoming
82902

January 18, 1989

Dear Mr. Stein:

Please accept these comments as part of the public review of the Revised Draft EIS for the 13 Wilderness Study Areas in the Rock Springs District. I appreciate the opportunity to comment and thank you and your staff for your work in putting these recommendations together. First, let me comment on the general nature of the proposals. The Red Desert area is one of the most unique and diverse in all of Wyoming if not in all of North America. I find it disappointing that only such a small percentage of the area will receive the benefits of wilderness designation. This is a sad testament to the overall condition of the Red Desert and should be witness enough to give wilderness designation to all areas that meet the criteria. It is clear that without such protection, few if any of the remaining undisturbed areas will survive into the next century - now is the time to act.

Over the years I have made numerous trips into the Red Desert area for pleasure and for filming purposes. Most recently I completed a trip across the area from the Rawlins District (Hwy 237) to the access on Highway 159. I was amazed at the number of roads and their associated condition not to mention the numerous oil wells and oil and gravel mines. Many of these roads have increased the opportunities for motorist recreation within the area and have contributed to the nation's energy needs. But in so doing, these roads have also diminished the opportunities to find solitude - for both man and beast. Over 50% of the Rock Springs District no longer meets wilderness criteria - this means that all this land is now available for further development. Designating the few remaining and scattered natural areas as wilderness will not cause a hardship or developmental intrusions. Let wilderness now have its fair share of the multiple use concept in the Rock Springs District.

To fail to designate any of these special natural areas as wilderness and thus to assume that they will remain pristine and free of development is quite irresponsible and demonstrates a degree of inertia that should not be part of land management decisions. Clearly, our past demonstrates that without wilderness designation, the land will be developed - more roads will be scraped into the landscape, more mines will be drilled into the depths of the area and more pills will be pumped into the sheep desert ecosystem. If there were some additional ground whereby the wilderness of this land could be forever guaranteed without wilderness designation, then I might be for that. But as it now stands, there is only one way to insure that these natural areas and the tranquility they provide will be preserved - and that is with wilderness designation. Anything short of this will mean that the area will sooner or later be altered, developed and environmentally degraded. It will become less than the other 50 percent of the District.

We do not hesitate (and rightly so) to protect our great cultural and archeological legacy, why may we not, in it so difficult to preserve a small percentage of our natural heritage? For it is our natural heritage which made this country great. Now we have the last opportunity to keep a little bit of our land the way it was. We must do it now or forever lose this opportunity - and forever become contented with the past.

Having spent time largely with the area and being quite familiar with the B-DEIS, I urge you to amend the Proposed Action recommendations so that in this document, but in addition, I also urge you to give the Red Creek Badlands Wilderness designation. The Red Creek Badlands meets all the wilderness criteria and I assume that it will remain as a wilderness area with wilderness designation is what I'm thinking. Plus the need to protect this watershed makes it clear that wilderness designation is the only appropriate action.

Box 1300 • Jackson, Wyoming • USA • 83001 • (307) 733-8906

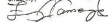
Responses to Letter 67

1. The final EIS provides a clearer explanation of why BLM has determined that some of the WSAs are not suitable for wilderness designation.
2. BLM has not assumed that WSAs not designated wilderness would remain free of all disturbance. The potential impacts to all resources, including wilderness values under both wilderness and nonwilderness management, were analyzed in the Revised Draft EIS. This includes estimates of oil and gas wells, miles of road, and other human activity. In some areas, where there is relatively low oil and gas potential, little if any oil and gas exploration is expected.
3. Several of the WSAs not recommended for as suitable for wilderness designation (Red Creek Badlands, Lake Mountain, part of the Sand Dunes, and part of Whitehorse Creek) include Areas of Critical Environmental Concern (ACEC). These ACECs highlight the area for special management.

In addition, I urge you to maintain the integrity of all Areas of Critical Environmental Concern and to develop, prepare and implement a multiple ground management plan for several areas which no longer meet the full wilderness criteria but have suffered only minor human interference. These are the Devils Playground-Twin Buttes, Snake Flats, Red Lake and Whitehorse Creek areas. Just because they have a few scattered roads within their boundary does not mean that they should be abandoned to unrestricted development. And according to the R-DEIS, these areas have at least 10% of natural from the energy committee. Consequently, there should be some way to protect these areas from further development outside of wilderness designation - perhaps this would involve nothing more than permanently removing them from the mineral leasing base and prohibiting new roads or the upgrading of existing roads into tracks.

Thank you for this opportunity to comment and hope that you take my suggestions to heart.

Sincerely,



Franz J. Camenzind, Ph.D.

Responses to Letter 90

1. Your view that wilderness is a national issue is correct. People all over the country commented on the Revised Draft EIS. This indicates the national constituency for wilderness areas in western Wyoming. The EIS includes a survey of Wyoming voters which shows that a larger percentage of Wyoming residents may be opposed to wilderness than is true nationally. This is a consideration which should be taken into account. However, the concern is reflected in the finding that local residents would be more affected by a decision than someone living in the eastern part of the country.
2. The EIS will help determine which WSAs are suitable for wilderness designation.
3. Oil and gas development is a key issue because it is a major resource management concern in this part of Wyoming. It may cause adverse impacts to other resources. Oil and gas development is also an important national concern, both in terms of maintaining a strong national and regional economy and in reducing the nation's dependence on foreign oil.

Jan. 24, 1989
Brian Suderman
1117 Bradley
Laramie, WY 82070

Alan Stain
Rock Springs District
Bureau of Land Management
P.O. Box 1669
Rock Springs, WY 82902-1669

Dear Mr. Stain and Rock Springs BLM:

I am writing to comment on the Revised Draft Rock Springs District Wilderness EIS. My comments will be of a general nature. I am commenting for myself and the many others that feel as I do, but for some reason did not hear about the opportunity to comment (it should have been better publicized, and publicized nationally, not just regionally). There are nationally owned lands, and someone as influential as you should have at least said in what happens to those areas someone in Laramie or Jackson.

It is obvious that whenever any significant potential for oil and gas is present in any of the areas, "no wilderness" in the proposed alternative. For all I know, Exxon could have written up the EIS. Why in the opposite viewpoint never considered-if the potential for oil, natural gas, preservation and conservation of endemic or plant species, primitive recreation and saving whole ecosystems is present, propose all wilderness?

The major "key issues" for each area had to do with oil and gas exploration and development. Why use this the main key issue? We're dealing with nearly undisturbed, wild land here—probably the richest, most valuable resource left on the planet. Oil and gas exploration and development benefits only an extremely small minority, namely, wealthy corporations (who seem to wield a very strong influence on the BLM), while permanently adversely affecting the land, vegetation and wildlife, the future possibility of using the land for any type of wildlife, natural enjoyment or primitive, non-motorized recreation. Which is the wise choice—the short-term monetary benefit for a few wealthy individuals or the long-term benefit for the land, the wildlife and the vast majority of U.S. citizens, the owners of the land?

All 13 Wilderness Study areas should be designated wilderness, and be closed to mining, mineral exploration, logging and grazing, and all forms of mechanized travel. These lands and what they can give us in our natural state are much too valuable to be destroyed for a little oil or natural gas.

Sincerely,

Brian Suderman
Brian Suderman

126

Response to Letter 126

The BLM recognizes that OHV use is a "legitimate" use of the public lands. We recognized the need to provide for OHV use on public lands in the Rock Springs District, and particularly, to provide opportunity for OHV use somewhere in the Sand Dunes. For this reason, an open OHV use area was designated in the Sand Dunes. Under nonwilderness, OHV use in much of the Sand Dunes would be limited to existing roads and trails. If all or part of the Sand Dunes WSA is designated, the open OHV area would receive more concentrated use than if all or part of the WSA is made open to OHV use. However, dispersing OHV use would create more, not fewer conflicts outside of the open area.

BLUE RIBBON COALITION INC.

Providing our natural resources FOR the public benefit OF THE public.

P.O. BOX 6446-POCAHONTO, WY 82401-2506 337-0406 or 337-1107

January 27, 1989

Area Manager
Rock Springs BLM
P.O. Box 1669
Rock Springs, WY 82902-1669

Dear Sir:

Concerning Wilderness recommendations for your district:

We are very concerned at the apparent lack of consideration given Off Highway Vehicle (OHV) recreation in your proposed Wilderness recommendations. Over and over the statement that "there would probably be no overall effect on recreation activities because there remains abundant opportunities for this type of recreation in other areas near the WSA," clearly illustrates a lack of knowledge of OHV recreation requirements. This attitude serves to concentrate motorized recreation use into ever smaller areas, where the concentration of use can then be used as justification for further restrictions due to unacceptable impacts. This "zero-sum" management philosophy with regard to motorized recreation is counter-productive. The best policy for the resource, and the user, is for all uses to be as widely dispersed as possible. Crowding more and more motorized users onto fewer and fewer areas hurts the environmental objectives in their campaign to have our legitimate use of public lands eliminated.

The impact of your land management decisions on motorized recreation should be more carefully considered. We request that our member organizations in Wyoming and Colorado be provided detailed information on the projected impact on motorized recreation of any decisions that are likely to affect that use. Enclosed is a copy of our organizational membership list, with the organizations underlined that should be kept informed on motorized recreation issues on your district. Please send us information on these decisions also, along with copies of any correspondence between your office and our member organizations. Thank you for the opportunity to comment on your Wilderness recommendations.

Sincerely,

Clark
Clark L. Collins, Executive Director

cc: Wind River Multiple Use Advocates
Blue Ribbon Coalition President Henry Yake, Pinedale WY

January 26, 1988

Mr. Alan Stein
Rock Springs District, BLM
P.O. Box 1849
Rock Springs, Wyoming 82902

Sirs:

I wish to comment on the BLM Wilderness Review for your district. I am thankful that you are considering wilderness designations for the lands in your trust. Future BLM administrators and the citizens of the U.S. will greatly benefit from every acre of wilderness that is designated on BLM lands in Wyoming.

I am concerned that your office has recommended a bare minimum of wilderness for your district. Of the 3.7 million eligible acres I would hope that at least 2 million would end up in the Wilderness Preservation System.

In particular it is critical that the BLM strictly regulate the use of ORVs on the lands in your jurisdiction. Two Executive Orders (numbers 11644 and 11969) direct the BLM to close its lands to ORVs unless officially designated open and to conduct thorough monitoring of the environmental effects of ORVs and their impacts on other types of recreation. According to law, the BLM has the responsibility to close its lands to ORVs and only open lands that have been specifically designated as ORV use areas.

There is no need for you to receive specific complaints from non-ORV users about ORVs in order to close your lands to ORVs. Suffice it to say you open yourself to litigation if you fail to follow the letter of the executive orders mentioned above.

ORVs cause extreme damage to the very base of terrestrial ecosystems. Soil erosion caused by ORVs often exceeds US Soil Conservation Service standards by more than 44 times according to CIG studies. When concentrated, localized soil erosion occurs, plant and soil die and the animal life dependent on it follows. The hardship exposed following ORV erosion is usually uninhabitable to plants and so remains barren possibly for decades or centuries.

1

2

Responses to Letter 127

- The 13 WSAs analyzed in this EIS, along with the Scab Creek Instant Study Area and the portion of the Adobe Town WSA in the Rock Springs District, were identified during the inventory process. The rest of public lands in the district do not contain characteristics that make them eligible to be considered as a WSA. The percent of the district being evaluated for wilderness designation is less important than the values being considered for designation in those in the WSAs.
- The WSAs not designated wilderness would be managed under a "limited" designation for off-highway vehicles (OHVs). This means that OHVs would be limited to existing roads and trails. The Revised Draft EIS considers many of the impacts you described under the No Wilderness alternative. However, OHV use is a "legitimate" use of the public lands (see response to Blue Ribbon Coalition).

127

2

Severely eroded BLM lands are useless to game and non-game wildlife species. Barren lands are useless to livestock and to out-of-state visitors. As such, ORVs preclude most economic and non-economic uses of BLM lands. And in return their contribution to the local economy is trivial according to studies.

The BLM has a responsibility to maintain the basic ecological health of the lands in your charge for the long haul. It is essential that you allow use of these lands but not use that destroys the basic ecological viability of the land and precludes all other uses. ORV use is NOT an exclusive use.

Studies carried out by the Presidents Council on Environmental Quality (CEQ) have born out and documented the extreme conflict between ORVs and other recreationists. In the desert ORV noise carries for miles, disturbing all other users and rendering any "solitude" impossible. Given that such conflicts have been quantified and documented by the CEQ and others, there is no need for your office to wait for conflicts to occur in your area.

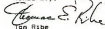
2

Specifically I would hope that you would include all of the Lake Mountain HSA in your recommendation for wilderness. The Abilisk Pass and South Pinnacles areas should be designated wilderness without division. The Devil's Playground and Hot Creek Badlands should be fully protected for their archaeological values and because they are near other lands that have been intensely developed. Antietam Creek is of particular scenic and ecological interest and should be fully protected.

The entire Honeycreek Buttes area, the Sand Dunes and Buffalo Leap area should be designated wilderness in full.

As a former resident of Vernal, Utah, I know these lands fairly well. I hope you will rise to the task of expanding the BLM's stewardship to include extensive wilderness and work to exclude ORV from a majority of your lands.

Sincerely,



Tom Rife
680 E. 27th Ave.
Eugene, Oregon 97405

January 25, 1989

Alan Stein
Rock Springs District
Bureau of Land Management
P.O. Box 1689
Rock Springs, Wyoming 82902-1689

Re: Revised Draft - Rock Springs District
Wilderness Environmental Impact Statement

Dear Mr. Stein,

Thank you for the opportunity to comment on the above draft for the record.

I have thoroughly studied your draft and although I can see that a lot of thought was put into it, I can not agree with the conclusions drawn. These areas are not Wilderness, as they are already being used for other purposes and I don't see any reason to "hand a title" on them to keep people from driving into areas that already have roads. The areas that you have approved have stayed the way they are because they are used mostly by people from this area. Once it is designated as Wilderness, that will change for awhile. People will come expecting to find something totally different than what we have here, some will even feel cheated, as the areas are pretty much the same as many areas in Wyoming. The Sand Dunes are better suited for off road vehicle use than walking, as are most of the areas that you are recommending for Wilderness.

I have lived here all my life and the wildlife in the area are better off with people here to help them survive. The predators would soon do more damage to the wildlife than the people that live in this area ever do. Most people brought up in Wyoming know not to unnecessarily disturb the animals. We were raised to appreciate the wildlife and to help with preservation of not only the animals and birds, but the land, too.

My grandmother helped teach all of us (we still have five generations in the family living in Wyoming) about the land and the animals. Now, the government is telling her, by putting so much land into Wilderness, that she can no longer enjoy the land that she helped to preserve. This makes me very angry, as she deserves to be able to go anywhere she wants to, especially now that she can no longer walk any great distance.

I will not comment on each area individually, as it would take a book almost as long as your impact study to refute or disagree with what you have said, but in the first study, it

1. As you point out, some of the WSAs do contain other uses and evidence of current or prior human presence. The EIS identifies the WSAs where the evidence of human presence is substantially unnoticeable. These areas are recommended as suitable for designation as wilderness.
2. As you point out, one potential use of the Sand Dunes area is for motorized vehicle recreation. The Revised Draft EIS pointed that out in the analysis for the Sand Dunes WSA. Immediately to the east of the Sand Dunes WSA is an area that is open to off-road vehicle use. BLM believes this area responds to the public demand for this type of recreation. Designating the Sand Dunes WSA as open to off-road vehicle use would only shift the use from the currently open area to the WSA.
3. The wilderness concept was developed to preserve areas worthy of protection in their current condition. Part of this concept is to keep the evidence of people substantially unnoticeable. Noise, as from motorized vehicles, is one evidence of human presence. Solitude is an important value and component of the wilderness concept. The beginning of this Part on Consultation and Coordination reflects the findings that there are strong opinions from local residents against wilderness designation. This factor is important to convey throughout the decisionmaking process.

139

was made clear that the opinions of the people in the area were important, and since the impact study did not consider anyone other than bikers, bird-watchers, horseback riders, and photographers to any degree, I thought I'd present a native's point of view.

I would like to make one comment about the preparation of the study. I feel that better information could have been obtained by talking to the people who know the area better than anyone else, and that is the old-timers, and the people who live or use the areas being studied.

If I had a vote on what should be done with all of the areas studied for Wilderness designation, I would vote to continue to keep the land in multiple-use designation, maintain a very low grazing fee to promote ranching, encourage gas and oil exploration, ease up on some regulations, but make sure that rehabilitation work is done after the land is abandoned and ask the old-timers the best way to do this because they know how to care for this land better than anyone else. These areas are, however, that need stricter enforcement. People who chase the wildlife with vehicles should be arrested and punished. People who dump garbage or leave their trash behind when they leave an area should be made to clean up the area.

Before more money, which we cannot afford, is spent on additional Wilderness studies, I hope that the government will take more time to look into how much of our State is used for "special" or "recreational" type purposes. We already have much more land than is necessary put aside for the future generations. If we don't start encouraging people to bring their business to Wyoming, we will soon have a worse economic situation than we already have.

Sincerely,

Alan Stein
Irene Stuedeman
Rock Springs, Wyoming

4. The comment process on the Revised Draft EIS is part of an approach to get comments from local people, as well as from people elsewhere in the country. The Final EIS was revised, where appropriate, to correct inaccuracies, improve information, clarify points where we could, and generally to improve the analysis in the EIS.
5. Any WSAs not designated would provide other values of multiple use. Multiple use management would differ somewhat on an area by area basis. The needs of each individual area would be considered in developing a management approach. In some cases, restrictions on various activities would be greater, while in other cases restrictions would be less. BLM management would always try to eliminate unauthorized uses.

Thank you for the information you provided on several of the WSAs. The descriptions of the WSAs were revised in the Final EIS to include some of the pertinent information.

Jones and Lynn Dufour
300 Mountain View Dr.
Rock Springs, Wyoming 82901

Mr. Al Stein
Bureau of Land Management
P.O. Box 1987
Rock Springs, Wyoming 82901-1895

RE: Wilderness
Comments

Dear Mr. Stein,

Over the past several years we have followed the progress of the wilderness area review process in Wyoming and have reviewed several of your reports. We wish to have the following comments considered as constructive input for the decision process.

Some of the comments previously submitted appear irrelevant to the wilderness issue. Animal damage control will apparently continue with only minor restrictions. Reconnoitering, fishing, hunting, camping and most other outdoor recreation exclusive of motor vehicles will be allowed. Livestock grazing (although not compatible with the wilderness concept) will remain permitted. Licenses were analyzed and none of the wilderness areas are proposed to be fenced.

WY-040-206/307 Buffalo Hump/Sand Dunes

The area contains only the US railroad grade to detract from the visual wilderness quality of the area, making the sandy, stabilized rolling hills during the fall of 1987, offered solitude from the nearby well developed "Eden Valley". Forty-three of the Elmoreston site had also seceded to this undisturbed area, free of the DWR's. The area exhibits natural geologic processes and vegetative succession as a mature ecosystem. Freshwater ponds adjacent to the railroad were borrow pits during railroad construction. These now appear natural to the untrained observer and are in the process of filling in through natural sand and silt erosion. The Sand Dunes area contain a variety of interesting vegetation patterns and pond areas. I doubt that these ponds have been fully inventoried to determine just what animal and plant life have adapted to the unique environment. Spring of 1988, we hiked in to the tall dunes south of the Dix-Voie spring, only to find HWY tracks in the sand. The impact of an HWY tearing up the natural cornice at the dune shattered the solitude and naturalness which we expected. We requested the combined Buffalo Hump/Sand Dunes area be designated wilderness to preserve this nationally unique area.

WY-040-127/124 Honeycomb Buttes / Oregon Buttes

This is a super area which appears quite fragile. Within Honeycomb Buttes are two natural spring seeps providing an oasis for wildlife and man. Notable between great expanse of mudstone and clay outcrops are these small (1 to 3 acre) well vegetated spring areas. Has anyone bothered to classify the plant and animal life at these "waterholes"? Probably not. If a person seeks solitude, this place offers loneliness.

J.L. Duder-2

Intrusions by man are exhibited by an old motor trail made during the uranium days of the mid 70's and two faint truck tracks along the North Fork of Bear Creek, ending on a clay ridge. These intrusions will take a few years to disappear (probably several). In very little of the Honeycomb did we find evidence of man or man's abuse. The fossil hunter, photographer, nature nut or geologist would just go bananas at the natural state of the honeycombs. Oregon Buttes offers a different setting which should be experienced by camping on the west side of the butte and hiking the top and between the south butte and east butte. Wilderness designation would help maintain bird and other wildlife species of the area and preserve a timber pine ecosystem, affected only by nature (and those damn porcupines). Both study areas contain wilderness values, foregone on developed public lands of Wyoming.

WY-040-056 Red Creek Swilands

The BLM Unit Description and Summary of Characteristics tell it like it is. The area is highly scenic, erodible, fragile and very interesting. I must have been a Buffalo Winter area and a place where Indians often hunted. We have picked up a number of buffalo horn in the Bear Steer Cr. area and near the river. Many of the min. mahogany juniper ridge tops have tree rings, fire pits and artifacts. In 1974, a friend of mine found a "Good Value" in the lower end of Telephone Canyon near the Allen place, indicating that the area has some cultural values not mentioned in the unit document. Spending an afternoon under a juniper in the badlands during a summer rainstorm, gives a person a sincere feeling of solitude. The area could easily be expanded to take in more natural and scenic areas where trails have faded and the impact of man is nearly hidden. The Badlands are the place to come when the modern patriarch of every-day living tells the brain "no more snout".

WY-040-721 Raymond Mountain

We were only on Raymond Mountain twice, but thoroughly enjoyed the area both times. The jutting boulders offer a natural beauty which I think many locals take for granted. In the spring when wildflowers are in bloom the area increases in natural beauty. The Unit is unique geologically from other forested wilderness areas and has much better surrounding access for the hiker, hunter, horseback rider or rock/climber to enjoy the wilderness experience. Raymond Creek shows sign of some serious erosion, apparently from some road building and livestock trailing. The area has lots of opportunities for solitude once one travels east over the first hogback. This area should be included in the BLM Wilderness System and nominated for designation.

If Theodore Roosevelt had not designated National Forests at the turn of the Century, how much would now be privatized, cut over, mined out and spoiled? How much public forest would there be for our children and future generations to enjoy? Modern man

is nearsighted and wishes to live for today and bequeath nothing of our natural surroundings to those who survive him. He is selfish. Wilderness is planning for the future.

Thank you for the opportunity to comment on the things we love.

*Jim Under
Lynn Under*

-3-

Feb 5 1989

277

Blow Stein
Blow Springs Habitat
Bureau of Land Management
P.O. Box 1869
Frank Springs, Wyo 82535-1869

Re: Wilderness Designation for B.L.M. land in the
Red Shovel - OPPOSED

Dear Sir,

I didn't believe I would see ~~any~~ ^{how to write} this letter opposing wilderness designation for certain areas in the Red Shovel of Wyoming. As I read your book - and after reading these areas for twenty or more years there is no reasonable way these areas meet the requirements for wilderness designation. Through ^{out} your book the facts are distorted, and tend to make some very unfamiliar with the area in question believe that these areas are untrammelled by man (what ever that means) These areas have many roads, many staked claims, many man made reservoirs, lots of evidence of oil and gas activities

Responses to Letter 277

- BLM evaluated each of the 13 WSAs and found that some contained more evidence of human presence than others. The WSAs recommended as suitable for wilderness designation meet all the requirements to be determined suitable for wilderness designation. In the WSAs recommended, previous disturbances are substantially unnoticeable. The exceptions you point out, an improved road and a railroad bed, are between WSAs that are recommended as suitable. The presence of a road or railroad bed at the boundary of an area does not preclude it from being considered suitable for wilderness designation. The values inside the WSA are critical concerns.
- "Untrammelled" in the context of wilderness is intended to mean essentially uninfluenced or unencumbered by humans and their activities.
- Solitude is an important part of the wilderness experience, but it is not the only aspect of wilderness that is of value to various individuals. While there may be many areas where one would not be disturbed, evidence of 2-tracks, seismic trails, and other human activities may detract from the wilderness experience. These

Certain areas are divided by main 277
graded and impass roads - and
one divider line so of all things 1
an abandoned Railroad Road bed.

As I understand what I hear
it is already decided that these areas
will receive a Wilderness Designation
regardless of the public response - if
this is the case why has all the study
been done and all the money spent
on a very hard to read technical book.
Nations in essence, it is all rather
mixed up and wrapped. Please 2
give me the definition of untrammeled
whether doesn't know what it means.
It appears as BLM are the
trammels by restraining and
confining the public from these
areas, we try to travel as we once
did and keep fingers away to S.A.
signs on every road, doesn't sound
like a roadless area to me.
If the foot hardy people want

to back pack in the Red bluffs they 277 3
would need Combs - there is no way
you can carry enough water with you
for an extended stay in these proposed
Wilderness areas.

If people want to walk & back pack
there is unlimited opportunity anywhere
in the Red bluffs area as is in how
administration I know - One does it
and you few jump off the road 3
anywhere and walk and be very
alone - you will see a white
mountain occasionally and a red pine
sky on a clear day - the same
things you would see from the
Wilderness area if it occurred.

As I read your propaganda the
main reason for designation is
to stop oil and gas and mineral
exploration - right! So why does
it have to be a Wilderness? Lead
of all a managed wilderness where
resources can be maintained - benches
can go in vehicles, trees can be
replaced, fallen timber can be
analyzed for oil and gas exploration
by the government

are some of the reasons why Congress established the National Wilderness Preservation System. BLM believes that the character, uniqueness, and outstanding values of the WSAs recommended as suitable would add substantially to the National Wilderness Preservation System.

277

Please place me on your mailing list
for all publications and newsletters about the
Red Desert. Also please advise me
as to what UNTRAMMELED means.

Lois J. James
818 Humboldt Circle
Burlington Wyo 82501

SUN

February 6, 1989

Mr. Al Stein
Planner
Rock Springs District
Bureau of Land Management
P. O. Box 1869
Rock Springs, WY 82902-1869

Re: Revised Draft Environmental Impact Statement
Wilderness Report
Rock Springs District

Dear Mr. Stein:

On behalf of Sun Exploration and Production Company (Sun E & P), I appreciate the opportunity to offer our comments on matters worthy of consideration during the comment period for the Draft EIS/Wilderness Report issued recently by your office.

Since the 1940's, Sun E & P, an independent energy company headquartered in Dallas, Texas, has been an active participant in the search for and development of oil and gas resources in the state of Wyoming. Throughout this period, Sun E & P has been appreciative of the outstanding working relationship between industry and the surface management agencies. Present personnel at the BLM Rock Springs District Office have continually exhibited an understanding of industry's concerns and have provided the flexibility to work with us to attain both the agency's and industry's goals.

As an indication of this continuing cooperative effort, the following comments on the Draft EIS/Wilderness Report are respectfully submitted for your consideration and review:

1. We would like to express our support for the nonwilderness recommendations for the Lake Mountain, Alkali Draw, South Pinacles, Alkali Basin - Sand Dune, Red Lake and Whitehorse Creek Wilderness Study Areas because they contain significant reserves for oil and gas.

Domestic Exploration
Northern Region

282

RECEIVED

FEB 07 1989

Sun Exploration and
Production Company
Twenty-Fourth Street, 1000
1001 Broadway
Denver, CO 80202-3000
303.296.5000

Responses to Letter 282

1. BLM agreed, in responses to comments from other members of the oil and gas industry, that oil and gas exploration and development can take place in an environmentally acceptable manner. The withdrawal of a WSA from oil and gas leasing is not the only decision being supported by the information in this EIS. This EIS is intended to serve as the basis for deciding if an area should be designated wilderness. While oil and gas activities may result in acceptable effects on other resources, such activities are not compatible with wilderness values. That is the reason for the withdrawal of wilderness area from oil and gas leasing.
2. After reviewing the information in this EIS, BLM continues to believe that 5 of the WSAs are suitable for wilderness designation. The EIS also contains the best estimates of oil and gas resources foregone if each WSA is designated wilderness. Congress will take this tradeoff into account in its decision on whether to designate a WSA wilderness.

Page Two
February 5, 1989

2. On the other hand, we oppose the wilderness Recommendations for Grand Meadles, Buffalo Hump, Sand Dunes, Honeycomb Buttes and Oregon Buttes wilderness Study Areas. Because these areas, too, have significant potential oil and gas reserves, we are opposed to forever losing the opportunity in determining the significance they might have for energy development.
3. It is our view that our industry has demonstrated repeatedly that we can explore in environmentally sensitive areas using technology which mitigates the harm done to sensitive surface areas. In light of the demonstrated compatibility of oil and gas activities with other resource values and uses, we believe that it is unnecessary to close areas with high potential for energy resources from future development.
4. While we recognize that the BLM was directed by law to study its land for wilderness suitability, it does not state that the BLM must recommend any of its lands for wilderness, specifically energy-FIBS lands. To the contrary, it has been made clear in the BLM's wilderness study policy that oil and gas resources must be given adequate consideration during the decision making process. We feel that the BLM should give more consideration to the energy potential of the 5 WSA's recommended for wilderness designation.

Thank you for the opportunity to air these concerns.

Very truly yours,

SUN EXPLORATION AND PRODUCTION COMPANY

Jon Rodrick
Jon Rodrick
Professional Landman

JR:gh

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2

Comments concerning the Revised Draft of the [Bureau of Land Management] Wilderness Environmental Impact Statement for the Rock Springs District, Wyoming

Submitted by Ted and Barbara Cochran
509 No. Grand Street,
Lander, Wyoming 82520

The revised draft of the Rock Springs District wilderness EIS is definitely not an accurate or fair statement of the primary uses, or impacts of the wilderness study areas involved in this document. The figures for visitor use days are not correct or even close to being accurate and reflect only the uses of the area since 1966. This data was provided by Alan Stein of the Rock Springs BLM. These areas were already being controlled as W.S.A.'s and motorized vehicle use was not allowed. I think to use these figures allowing more use by non-motorized recreationists, when motorized use was prohibited, to justify wilderness designation is irresponsible. We have personally used the Sand Dunes and Buffalo Hump areas for 18 years. My family and I have been in these areas many times each year and have never seen other users who were not using motorized vehicles of some kind. These areas are still not used by hikers or non-motorized recreationists to any great extent.

The EIS keeps referring to pressure and stress put on the elk herd by vehicles and multiple use. We called the Wyoming Game and Fish, district biologist, in Green River, Tom Christensen. He said that the elk herd is presently between 500 and 600 head. The biologist said this was the level they wanted to maintain the summer herd at and that for the past several years have had no problem doing so. He also said that vehicles in the area have had no effect on the elk herd and that wilderness designation would not benefit the elk herd. His one concern about wilderness designation was that it would not allow the game to do any habitat enhancement. Although they were not planning on doing this in the near future anyway, we have noticed over the years that wildlife in these areas are abundant and doing very well. The use of these areas by motorized vehicles does not harm the wildlife and drive them out.

Oil and gas reserve amounts stated in the EIS vary significantly in different sections. This tells us that there is a lack of research and knowledge on this subject. This needs to be provided for a more accurate picture of how such reserves are present within these W.S.A.'s.

There are many acres of state and some private land in the W.S.A.'s. The problem of how to deal with this is not adequately addressed. The EIS says the federal government will simply absorb this land into the area, and make trades or buyout the property. It does not say how this is to be accomplished or if the land owners are even interested in such a deal. It is my understanding that no funds are to be appropriated solely for the use of these areas.

The EIS says 565 cards and letters were received on the original draft and were reviewed for the revised draft. A large amount of time, money, and energy went into getting people to comment on these W.S.A.'s. In talking with Alan Stein these people were not contacted directly about commenting on the revised draft. The notices in the media and newspaper letters we all that was used to notify the public of this. Now they say only the comments on the revised draft will be used to make up the final draft. The majority of these comments were opposing or supporting wilderness designation. Not just commenting on the draft itself.

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Responses to Letter 286

1. Estimates on visitor use are based on the current status of the WSAs. BLM did not estimate, either for current or future use, the level of use in violation of vehicle use restrictions. The use estimates consider motorized vehicle use on the railroad bed between the Buffalo Hump and Sand Dunes WSAs. While the level of nonmotorized recreational use in the Buffalo Hump and Sand Dunes WSAs is relatively low, BLM disagrees with your statement that such use does not exist. Members of BLM staff have seen people out there. BLM has received correspondence from people who go out to the dunes area. Many of these people engage in nonmotorized recreation.
2. BLM believes if the area is not designated wilderness, and there is increased oil and gas activity, the changed situation would result in avoidance of the area by big game. This avoidance is not occurring now because the increased human disturbance is not occurring.
3. Wildlife habitat enhancement projects and the methods of implementing them are more restricted than in a nonwilderness area but they are not precluded.
4. The estimates on potential oil and gas reserves are based on best available data. The reserves in the WSAs are not known reserves but poten-

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The fact still remains that the people do not want anymore wilderness. In reading the revised draft it states that the general public is against more wilderness, but that this is due to a misconception of what wilderness means. This statement is entirely incorrect. Working people know what wilderness means. They have had dealings with it for years. They know what you can do in wilderness areas and what you cannot do. This is why the majority of the people are against it. All studies conducted by the BLM, Universities, and private research groups come up with the same response, NO MORE WILDERNESS.

This revised EIS proves that the need or desire for more wilderness is not there. It does not show where multiple or restricted use is detrimental to wildlife or habitat. It does not show any points as to why these areas should be designated wilderness. The fact that these areas have been used extensively for years by OHV enthusiasts and still are good enough for wilderness consideration should be good enough of its desirability. It does not show clearly how the BLM is going to deal with logging, private and state.

It does not show how the BLM is going to manage or administer these wilderness areas. In the wilderness act public law 98 stat 990 (16 USC 1133-1136), it states that no appropriations will be made solely for managing or administering these wilderness areas. Now are they going to do this without the money?

I feel that the revised draft, as did the original draft, shows a definite bias toward wilderness designation. It ignores the positive side of wilderness designation, while over emphasizing the draw backs of multiple use. It uses figures that are drastically over estimated to prove non-restricted use and again understate the amount of OHV use in these areas before the W.S.A.'s prohibition. It says OHV enthusiasts can use the area designated for this and that should be enough. First of all this area also encompasses an active gas field with well and supported gas pipelines. These obstacles could pose a serious hazard to people using OHV's in this area. The designated OHV does in way to small. I worry that by concentrating that much use into such a small area is going to create problems that the BLM will have to address. This will be done by partial closure, complete closure, restricted or limited use of this area. We have also noticed that since the BLM started controlling these areas as wilderness the amount of use by OHV enthusiasts has declined. On one Memorial Day weekend we talked to people from many cities in the state and saw people from Colorado. We have pictures of these camps and the various OHV's used in the area. This was before the W.S.A.'s were controlled as wilderness. Now people still use the OHV area, but the number has decreased drastically. We feel any legislation that will affect the economy of the area should be considered very carefully.

We feel that to designate these areas for wilderness would be a serious mistake. The majority of the public are against more wilderness. By the revised draft statements, only 1-4% of the public use a wilderness area, it would be totally irresponsible of our government to give these areas wilderness designation. We feel the most of managing these areas as wilderness, when no funds are available solely for this, would be too much for the BLM to properly control.

In regards to the old railroad bed that runs between these two areas, we do not think that the BLM can close a private right of way. It is our understanding that the government does not plan to condemn this right of way. This roadway should be left open for public use.

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tial reserves. Even if there is a producing field in a WSA, there would be uncertainty regarding the amount of oil and gas in the hydrocarbon reservoir.

5. See response to Comment 25-6 from Wind River Multiple Use Advocates.
6. The statement that previous commenters were not contacted directly is misleading. The mailing list for the 1983 Draft EIS was used as the basis for developing a mailing list for the Revised Draft EIS. Many copies of the Revised Draft EIS were returned as "addressee unknown." To estimate the percent of those who are in favor of or oppose wilderness designation, the comments received on the Revised Draft EIS were used. This is the most current information available. BLM has no way of predicting who may have changed their mind in the intervening years between the 1983 Draft EIS and the Revised Draft EIS. For that reason, the opposing/supporting numbers from the 1983 Draft EIS were not used. See response to Comment 459 from Defenders of Wildlife (January 4, 1989 statement) for our reasoning on dealing with substantive comments.

7. The study included in the Revised Draft EIS on public attitudes on wilderness is an earlier study. Perhaps many local residents have a better understanding of wilderness that they did several years ago. Many local residents oppose wilderness designation because they recognize that uses would be curtailed in the area and that additional restrictions would be imposed on uses that are allowed.

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We do not feel that the Sand Dunes, Buffalo Ramp, or the old railroad bed should be closed to the public. My family and I have used these areas for the last 18 years and to see them essentially closed to our use hurts. Many of the advocates for wilderness designation state, "I have had a great wilderness experience in these areas." I have also had a wonderful wilderness experience in these areas, but so have my children and wife. We have enjoyed these areas since the children were just big enough to walk. This would not have been possible if these areas had been designated wilderness, and motorized vehicle use prohibited. We feel these areas should be left as they are now, and this way the majority of the people who still use these areas can, without worrying about getting into the wrong area and breaking the law.

Thank you,

*Mr & Mrs. Ted Carlman
and family*

cc: President of the United States,
George Bush
Governor Mike Sullivan
Senator Alan Simpson
Senator Malcolm Wallop

8. Some local residents feel strongly that there is no need for more wilderness. This feeling is far from universal. Wilderness is a national issue of national concern. Many people, both locally and nationally support wilderness designation. Most of the wilderness areas found suitable for designation in this EIS are very different in character from those already designated in Wyoming. These areas would be valuable additions to the National Wilderness Preservation System.
9. If an area is designated wilderness, we would develop a wilderness management specific to that area.
10. BLM recognizes that there are some conflicts between oil and gas development and OHV use in the area and have been managing the area to minimize these conflicts.
11. The Sand Dunes WSA was used for OHV recreation in the past. We do not believe the designation of the Sand Dunes WSA is the reason for the reduced use in the area.
12. There are no plans to condemn the right-of-way for the railroad bed. However, the right-of-way holder has indicated a desire to relinquish the right-of-way and BLM has asked for an abandonment plan.

Defenders OF WILDLIFE

February 4, 1989

Mr. Al Steain
Bureau of Land Management
P.O. Box 1869
Rock Springs, Wyo. 82901-1869

Dear Mr. Steain:

The following comments provided on behalf of Defenders of Wildlife concern the Revised Draft EIS for 13 Wilderness Study Areas in the Rock Springs BLM District. Nearly a decade of inventory, public hearings, decisions, and revisions have produced this Revised Draft. As Great Basin representative for Defenders of Wildlife, I particularly appreciate the use of the word "go". Although we disagree with some of your proposals, you and your staff have earned our respect for producing a document that includes an excellent analysis of what has transpired and where we are now.

It is important to stress, again, that of the whole (nearly six million acres) less than two percent of our public lands remain in a relatively pristine condition. This should be ringing loud bells and tell us, in the Rock Springs District, places where one may seek solitude, small areas where the hand of man remains unseen, are priceless, since there aren't any other such places, anywhere.

Congress provided the means to preserve these areas, for us, and for our progeny. We are allowed only one chance to accomplish this - and we are down to the wire.

Little more than a century ago, a group of men camped where the Firehole and Gibbon Rivers merge to form the Madison. They argued among themselves many of the same issues we are grappling with today. Should this treasure become the domain of a few, or be forever preserved for the benefit of all? Today we know this place as Yellowstone National Park.

Near the turn of the century, Theodore Roosevelt was instrumental in creating our great National Forests. There was wilderness, a lot, not much different than that of today. Preservation of precious places drives special interests up the wall. Special interests have a few problems of being unable to see beyond next week, let alone, envision a future where our kids, and theirs, will say, "Thank you, all of you, who had the foresight to preserve these places, for us, and ours."

I re-read my previous comments and can find little that does not pertain to the Revised Draft.

1244 NINETEENTH STREET, NW • WASHINGTON, DC 20036 • (202) 639-9210

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Responses to Letter 287

1. Red Creek Badlands - The Red Creek Badlands WSA includes part of the Red Creek ACEC which extends into Utah. BLM recognizes it is a fragile watershed. However, wilderness designation is not the only way to protect values such as watershed and cultural resources. BLM believes that management under the ACEC management plan, including controls on motorized vehicles and careful environmental analysis of proposed activities, would protect most resource values. However, ACEC management would not protect all of the area's remaining wilderness values. Restrictive resource management constraints may protect some of the area's remaining wilderness values, but that would not be the objective of the management constraints. It would be an added benefit.
2. Buffalo Hump/Sand Dunes - Thank you for the information on these WSAs. The Final EIS was modified to include some of the information.
3. Honeycomb Buttes/Oregon Buttes - Thank you for the information describing these WSAs. The Final EIS was modified to include the information.

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WY-040-406 Red Creek Badlands

Thank you, BLM, for asking the case that the Red Creek Badlands qualify, without reservation, for wilderness. "Slightly scenic, a fragile watershed, a valuable wildlife area, no oil or gas exploration or production is anticipated, no new roads". But not proposed for wilderness designation?

Cultural values in this area abound - from tepalc rings, Indian artifacts, bison remains, and 7, yet undiscovered. I have spent many a day (and night) camped in the Red Creek Badlands, soaking in the solitude, far removed from the rest-of-the-world. Truly, this area merits wilderness designation.

Red Creek Badlands constitute perhaps the most fragile area studied by BLM. We note, under your proposal of no wilderness, that off-road vehicles would be limited to existing roads and trails. Sort of an Area of Critical Environmental Concern (ACEC) designation? These things, ACECs, are a vital management tool, but they blow with the political winds. More today - gone tomorrow. The only way to protect, preserve, Red Creek Badlands for posterity, is through the wilderness process.

WY-040-366/307 Buffalo Hump/Sand Dunes

Solitude. Unspoiled. Unique. Awesome. Just words. But if you have been there, on foot, with enough time to get acquainted, you realize it would require the skills of Thoreau to describe this place, that is like no other place.

Early morning, before the Wyoming breeze begins to stir the sand, one who can read spoor can document everything that took place the previous night. The fine sand records all. A pocket mouse collected seeds here, and buried them there. The nocturnal Old kangaroo rat (unmistakable tracks since it hops like a kangaroo and drags it's long tail), fed on this here and dug a hole here, where it will sleep through the day. Here, the track of a white footed mouse abruptly ends; and one can read where the wing of a great horned owl brushed the sand.

Some years back I was equipping students from the Teton Science School with dune pools and their inhabitants. We were gathered at one end of a small pool, examining spade-foot toad eggs that still leech the pool, and baby spade-foot that seemed to be everywhere, and tiger salamanders the kids had netted for a closer look.

Two dune buggies came roaring over a dune, charged through the pool, drenching and narrowly missing the kids, and the drivers gave us a wave as they topped the next dune. Solitude?

One of my students noted an oil slick was beginning to form on the pond. On my return, a week later, tiger salamander bodies

were washed up on the East shore, most of the immature spade-foots were dead, and the oil slick was discoloring vegetation growing around the pool. Wise use of our natural resources? I think not.

Again, years back, when I was employed by Fish and Wildlife Service, I often herded my horses at the Chilton ranch. My ponies were turned loose to graze in the dunes, with the ranch saddle stool. When I rode out to gather the ponies I always looked forward to watching sagebrush elk gathered around the dune pools, grazing, even drinking. When the dune buggies came, the elk left.

Those who have observed this area over the years can attest: near the road that divides the WSA from the OWS area, near the Power line, is a plant that resembles Russian Olive. Before dune buggies were banned from the study area, this plant struggled to grow to a height of only 4 or 6 inches. Tires on OWS's ground now grow into the sand. Today, with most OWS's excluded, and even though the past few years have been below normal precipitation, this native of the dunes has blossomed to a height of 4 to 5 feet.

Where else, in July, can you traverse huge sand dunes whose surface is so hot it burns through your boots - and if you know where, dig a small hole, down into an ice cell, and deposit your legs or feet to cool while enjoying a swim in a dune pool. Truly, there is no place like this place anywhere.

We commend NLM for the addition of Buffalo Hump to the proposed wilderness area. This addition provides a well defined perimeter for the WSA and includes areas vital to this small ecosystem. And even though small, the aloneness one can savor, leaning against a sand dune, watching waterfowl and shore birds that inhabit the wet areas, soaking in the solitude - surviving that such places still exist - speaks loudly that this unique area should be designated wilderness.

WV-040-323/324 Honeycomb Buttes/Oregon Buttes

If one were to design a maze, similar to the one scientists use to monitor learning ability of mice and rats, the Honeycomb Buttes would suffice. Several times, when I have been stranded on the Red Desert by blizzards or mechanical failures, I've depended on dead-reckoning to get me home, and I've always made it. But in the Honeycombs, often, while wandering through it's maze, I've had to climb to the top of a butte to learn which way is what.

We are so fortunate to have places such as the Honeycombs, Oregon Buttes, the Sand Dunes, others, that remain like they were before homo sapiens took charge. Being the least populated of our 10 states helps a bit. However, these are places that no one else wanted - for oil and gas, uranium, coal, or trona extraction. Or even for homesteading. Unwanted, good for nothing places.

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But today, now that we have discovered that areas that have not been "pre-owned" are in short supply, we are proposing that Congress enact legislation to preserve a bit of what we have left. In the meantime, the woodwork is eroding everywhere who have problems seeing beyond tomorrow. If these special interest people ruled, we would have no Yellowstone Park, no National Forests, no National Wildlife Refuges. Concerning the wilderness issue, we trust that NLM will rule for all the people, and not just the few.

At one time, lake Goshute covered all we are discussing. When Goshute receded, turtles, by the thousands, left their remains in the Honeycomb, along with deer and other marine life. Years back, a friend found a bison skull in one of the handholds of Honeycomb caves. Dug there by predators? Unlikely. Probably by a rock who pruned us.

Without question, Wyoming's Honeycomb Buttes are the best representation of remote, multi-colored badlands in the West. As for solitude - the only human-made noise that might infringe would be aircraft.

WV-040-321 Raymond Mountain

Views from the high ridges in this WSA are unrivaled. The several access points to Raymond Mountain are a boon for hikers, photographers, birdwatchers. It remains empty along the crest some time back. The only disturbance I can remember came from a squirrel that either wanted a hand-out or wanted me to move out.

We trust NLM will propose that Raymond Mountain be included in our wilderness system.

Some charge that wilderness is nothing more than locking up the land. Nothing could be farther from the truth. While public land is multiple use land, one doesn't have to look very far to find single-use of the public's land. Coal strip mines, oil production facilities, electric generating plants, and many others. All of these have a rightful place on public land, as does wilderness.

Only a short time back, wilderness was something "up there". Near the top of the highest mountain. Today, we know that wilderness, "down here", is as important, or even more so, than alpine wilderness environments.

Thank you for the opportunity to be involved in helping to shape the future of a small part of our natural heritage.

Dick Randall - For Defenders of Wildlife
Box 507
Rock Springs, Wyo. 82901

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1860 Lincoln Street, Suite 404 - Denver, Colorado 80208
303/850-0088

February 6, 1989

Mr. Al Stein
Rock Springs District
Bureau of Land Management
P. O. Box 1889
Rock Springs, WY 82902-1889

Dear Mr. Stein:

On behalf of the Rocky Mountain Oil & Gas Association (RHOGA), I would like to offer our comments on the Revised Draft Rock Springs District Wilderness Environmental Impact Statement (EIS). As you are aware, RHOGA is a trade association with hundreds of members who account for more than 90% of the oil and gas exploration, development and transportation activities in the Rocky Mountain West. Consequently, we are deeply concerned when the Federal Government proposes management which would curtail further oil and gas opportunities in areas with high potential for these resources.

We are adamantly opposed to the wilderness recommendations the BLM has made on Raymond Mountain, Burfield Lane, Sand Dunes, Honeycomb Buttes, and Oregon Buttes Wilderness Study Areas (WSAs) because, as it was pointed out in the Wilderness Suitability Study EIS, all these areas have significant potential for oil and gas. Furthermore, we strongly question the need for an addition of more than 105,000 acres of wilderness in Wyoming when the wilderness acreage in the state already exceeds three million acres, almost on Forest Service land. Existing wilderness should be a critical factor when determining which BLM lands, if any, are suitable and warrant for wilderness designation. 1

Oil and gas revenues constitute a significant portion of Wyoming's tax base and economy. It is therefore incumbent upon the BLM to carefully consider socio-economic factors during the decision-making process. A detailed analysis of social and economic resources is mandatory in a wilderness document because the decisions contained therein will have far-reaching effects on the future use of the lands. Further, we do not agree that if these areas were to remain available to leasing that no growth would result in employment or revenues to the state and counties. Leasing these areas, alone, would help improve the economy by generating revenues. In addition, new jobs, and royalty and tax payments would be generated if a discovery were made. 2

Responses to Letter 304

1. Many of the wilderness areas already designated in Wyoming are very different in character than 4 of the WSAs analyzed in this EIS. The WSA that most closely resembles designated wilderness areas in Wyoming is the Raymond Mountain WSA. BLM believes believe that all of the WSAs recommended as suitable for wilderness designation would add to the National Wilderness Preservation System. Congress makes the final decision on which areas are designated wilderness. As a result of this EIS, BLM has determined which WSAs are suitable for wilderness designation. Congress is expected to take existing wilderness areas, among other important factors, into account in deciding whether a WSA should be designated.
2. A discussion on economic values of potential oil and gas resources was added to the Final EIS. See response to Amoco Production Company (446).

February 6, 1989

Mr. Al Stein
Rock Springs District
Bureau of Land Management
page two

RHOGA is not asking the BLM to refrain from making any wilderness recommendations. However, we oppose wilderness recommendations for lands which contain valuable commodity resources such as oil and gas. Industry cannot choose where these resources occur, but is forced to search for them, even in areas which have other sensitive values. However, oil and gas activities and the needs of environmentally-sensitive resources are not mutually exclusive. Far from it, there are many avenues available through mitigation that have prevented any long-lasting, adverse environmental effects from occurring in such areas.

The odds of making a discovery are extremely limited. Therefore, it is even more critical that lands with potential for oil and gas remain open to exploration and possible development. It is imprudent to reduce the available land base for exploration for and development of critically needed resources in favor of single use management such as wilderness.

The United States currently imports over 43% of its daily petroleum requirements. This figure is higher than during the pre-oil embargo period of the 1970's. Therefore, it is of paramount importance that the Federal Government do everything in its power to help reduce these imports. By permanently closing public lands to exploration and development, the BLM is doing just the opposite by contributing to the problem. RHOGA strongly urges the BLM to reconsider its recommendations for wilderness on these Wilderness Study Areas.

We appreciate this opportunity to comment on the Wilderness EIS. Please contact me if you have any questions regarding our comments.

Sincerely,

Alice Freil Benitez
Alice Freil Benitez
Public Lands Director

AFB:vc



February 2, 1989

Mr. Al Stein
 Planner
 Rock Springs District
 BLM
 P. O. Box 1869
 Rock Springs, Wyoming 82902-1869

Dear Mr. Stein:

RE: Rock Springs District Revised Draft
 Environmental Impact Statement/Wilderness
 Report

Unfortunately, I was unable to attend either of the two public hearings held in January but, on behalf of Merrithon Oil Company, I do have a few comments I would like to make. I want to commend you and your counterparts for the work that has been done to publish the OEIS. However, that does not mean that Merrithon Oil Company endorses all the designations/nondesignations recommended in the current draft. To be sure, you have my company's support on those areas recommended to be non-wilderness (Lake Mountain, Alkali Draw, South Pinnacles, Alkali Basin-Sand Dunes, Red Lake and Whitlatch Creek Areas). In doing so, it is our hope that you do not attempt to force pre-FLPMA leases with new restrictions or stipulations.

Merrithon does not support the wilderness recommendations for Raymond Mountain, Buffalo Hump, Sand Dunes, Noneycomb Buttes and Oregon Buttes Study Areas. Areas that have significant energy resource potential should not be declared wilderness areas. Our country needs to be more fully explored. Case in point is the decline in domestic crude oil production over the last several years. It appears that 1988 production is the lowest in over a decade. There are already enough wilderness areas designated in the state of Wyoming.

Thank you for the opportunity to comment.

Sincerely,

James H. Youngflesh

UNTCP

P.O. Box 918
 Houston, Texas 77253
 Telephone 713/282-9800

Response to Letter 312

The only WSAs not recommended as suitable for wilderness designation where there are pre-FLPMA leases are the Alkali Draw and Lake Mountain WSAs. A part of the Sand Dunes WSA also contains pre-FLPMA leases. Both the Lake Mountain and the Sand Dunes WSAs are also involved with ACECs which were designated to protect environmental values. Management in these ACECs is somewhat more restrictive than in areas which do not contain such important environmental values. BLM actions on pre-FLPMA leases, in WSAs not designated wilderness, would be to work with the leaseholder to try to protect environmental values of concern. If the area is not designated wilderness, preservation of wilderness values would not be a high priority concern but the approach we may propose for protecting other resource values may also protect other resource values.

There is no evidence to support the view that the recent decline in domestic crude oil production is due to wilderness designation, the withholding of lands from leasing in WSAs, a lower acreage of leased land, or any similar factor. The lower level of exploration and production appears to be due mostly to depressed prices. Wilderness is not a factor in this recent phenomenon.

Responses to Letter 326

TO: Alan Stein
 BLM - Rock Springs Dist.
 P. O. Box 1869
 Rock Springs, WY 82902-1869

SUBJECT: Revised Draft of EIS - Sept. 1988

SPECIFIC AREAS WHICH I WISH TO COMMENT ON:

1. Buffalo Hump and railroad bed at eastern boundary of WSA.
2. Sand Dunes

COMMENTS:

1. The NE wilderness designation should be assigned to the Buffalo Hump and the railway right of way should not be closed.
2. The Rg wilderness designation should be assigned to the Millpucker Sand Dunes area.

Reason for our decision:

First of all we believe in multiple use of our public lands. One of the keys to multiple use is access. Since 1969 the BLM office in Rock Springs has the majority of the Millpucker Sand Dunes closed to motorized traffic in this area, some 22,430 acres, why?

In order to enjoy these public lands a form of motorized transportation must be used. It is not practical in the sand dunes to hike or ride a horse because of the nature of the dunes. This is the basic reason we are opposed to the designation of wilderness.

The Buffalo Hump and railroad right of way are adjacent to the Millpucker sand dunes and the abandoned railroad separates the two areas which are being considered for wilderness designation. We are also opposed to a wilderness designation for this area for the same basic reasons.

These two areas are certainly unique and we have no quarrel with the BLM over these points of naturalness, solitude and supplemental values but why should the public be denied access to these areas. The only way the public can enjoy these areas is to be able to use some form of motorized transportation. This area is no longer (50 miles long by 10 miles wide) that

1. The BLM inventoried public lands in the Rock Springs District to determine which lands met wilderness characteristics. This is the initial step to comply with the requirements of FLPMA. Parts of the Sand Dunes were found to meet wilderness characteristics. They became the Sand Dunes and Buffalo Hump WSAs. The next step was to analyze these areas, prepare an EIS, and report to Congress. Until Congress makes a decision on designation, BLM is required to ensure that activities which would damage an area's wilderness values and jeopardize its eligibility for inclusion in the National Wilderness Preservation System are not allowed. To do this, BLM developed an interim management policy which controls motorized vehicle use.
2. The area you mention (50 miles long by 10 miles wide) contains 320,000 acres. The combined Sand Dunes and Buffalo Hump WSAs contain 37,609 acres (12 percent of the 320,000 acres). Of this, only 24,264 (65 percent of the 2 entire WSAs) acres are recommended as suitable for wilderness designation. The area recommended as suitable for wilderness designation constitutes only 7.6 percent of the Sand Dunes area you discuss in your comment. There is an "open" OHV area east of the Sand Dunes WSA and the rest of the area is limited to existing

the only practical way to enjoy it is to give it a no wilderness designation.

Areas of disagreement with the BLM:

1. Naturalness can be controlled by the user. The number of people who use these two areas is very small. We are not talking about thousands of users, maybe hundreds. Usage is very limited because of the location of the dunes (30 miles SE of Hook Springs and 15 miles E of Potosi). The revised draft indicates 500-600 visitor days annually for non-motorized recreation. In the past three years of using these dunes for recreation I have yet to see a backpacker or bird watcher. Numbers of users is not a problem and damage to the dunes is not noticeable because of the unique shifting of the sand from day to day. Tracks made by motorized transportation one day cannot generally be detected the following day.

We do not believe setting aside these two areas is a practical decision since the size of the proposed WSA would be very difficult to enforce and most costly to the BLM and the public in general.

Another area of disagreement with the BLM is in regards to primitive recreation. To my way of thinking, primitive recreation is walking or riding a horse. Some of these uses of transportation is practical. If the public cannot access these areas how can we enjoy the naturalness, solitude and supplemental values?

Finally as an overall observation of the no wilderness versus wilderness we think hunting, which already has slightly over 3 million acres designated wilderness, has enough in inventory. Antipathy is the word for anyone wilderness.

C. R. Kottkamp
 Carl W. Kottkamp
Mark H. Kottkamp
 Mark H. Kottkamp
 928 Elk Drive
 Elverton, WY. 82501
 2/4/89

3. The analysis contains our best estimates of the various kinds of uses that would take place under wilderness and nonwilderness management. BLM recognizes that there are people who would not use the area if they cannot use motorized vehicles. That is their preference. The estimates of use reflect these preferences. There are others who prefer to use the area without being disturbed by the noise from motorized vehicles.
4. If the WSAs are designated wilderness, BLM will develop a wilderness management plan. For the Sand Dunes and Buffalo Hump WSAs, it is likely this plan would include: (1) improved signing to inform the public of the special designation and importance of the area, (2) visitor registers and kiosks at important entrance points, and (3) patrolling of the wilderness area. That plan has not been developed. However, the natural terrain does help in managing the area. For example, very little unauthorized use is expected from the west side of the Buffalo Hump WSA.
5. BLM believes the area can be enjoyed without using motorized vehicles. From the public comments we received on the Revised Draft EIS, it is obvious that many individuals (including local residents) disagree with your view also. Therefore, no changes have been made to the analysis.

EXXON COMPANY, U.S.A.

POST OFFICE BOX 1060 • MIDLAND, TEXAS 79703-1060

PRODUCTION OPERATIONS

MIDLAND OFFICE

MIDLAND OFFICE

February 9, 1988

Rock Springs District, Revised Draft
Wilderness Environmental Impact Statement
Exxon CommentsAlan Stein
Rock Springs District
Bureau of Land Management
P. O. Box 1060
Rock Springs, WY 82902-1060

Dear Mr. Stein,

Exxon Company U.S.A., a division of Exxon Corporation, would like to submit the following comments on the above referenced Environmental Impact Statement (EIS). These comments are from the perspective of Exxon's Production Department, and supplement separate comments which will be submitted by Exxon's Exploration Department.

Exxon specifically supports the non-wilderness recommendation for the Lake Mountain Wilderness Study Area (WSA). As you know, this WSA is directly adjacent to the producing acreage associated with the Lalsarge Project. Using the EIS projection of 5,000 to 6,000 billion cubic feet of gas within the WSA, designation as a wilderness area would mean these reserves could never be recovered. This inability to recover reserves represents a potentially significant economic loss to the county, the state, and the federal government due to lost jobs, tax revenues, and royalty payments. The existing Rock Creek Area of Critical Environmental Concern (ACEC) ensures that the high value wildlife and fish habitat will be adequately protected. The decision to not recommend this WSA for wilderness is an appropriate balancing of the high surface and subsurface values. The decision also recognizes the successful application of appropriate surface disturbance stipulations.

As a general comment, Exxon is concerned about the proposal to designate five areas, containing over 100,000 acres, as wilderness. That proposed designation is in addition to the 3.1 million acres of designated wilderness already existing in Wyoming. In addition to the designated wilderness areas, other opportunities to experience the solitude associated with wilderness abound in the state's numerous National Parks and undeveloped areas.

A DIVISION OF EXXON CORPORATION

Responses to Letter 331

1. The Revised Draft EIS showed potential oil and gas resources foregone for all of the WSAs, if they are designated wilderness. The Final EIS adds information on the value of these potential reserves. BLM cannot evaluate the impact of designation on national security. BLM's role is to determine which, if any, of the WSAs are suitable for wilderness designation. Congress makes the final decision on which areas are designated wilderness.
2. Four of the 5 WSAs recommended as suitable for wilderness designation are different from wilderness areas currently designated in Wyoming. These would be valuable additions to the National Wilderness Preservation System.
3. BLM agrees that oil and gas development not only can take place in an environmentally acceptable manner, but that industry has demonstrated a willingness to work with government to ensure that it does. However, industrial development and other forms of intensive and motorized human activity are not considered consistent with wilderness.

Alan Stein

-2-

The need for additional wilderness areas has not been demonstrated. The areas proposed for designation as wilderness are all recognized as potential for oil and gas resources, with potential reserves estimated by the BLM to be in excess of 267 billion cubic feet. This reserve CANNOT be developed from adjoining acreage, because designated wilderness cannot be LEASED. Therefore, unlike a No-Surface Occupancy stipulation, such development options as directional drilling are not legal. In an era of increasing dependence on imported energy, prohibiting any future development in such potentially productive areas needs to be seriously evaluated for its possible impact on national security.

Using modern technology, and careful planning and development, responsible energy development has been proven possible in sensitive environmental areas. Prohibiting all future development in areas of high potential is not necessary to protect surface values.

Thank you for the opportunity to comment. Please refer any questions on this issue to Linda Chernowich of my staff, who can be reached at 815/688-7583.

Sincerely,



BDC:cdm

February 6, 1989

Alan Stein
 Rock Springs District
 Bureau of Land Management
 P.O. Box 1828
 Rock Springs, WY 82902-1828

Dear Alan:

Enclosed is a copy of the Wyoming Farm Bureau Federation's comments relating to the Rock Springs District's Wilderness Environmental Impact Statement.

Sincerely,

Ken Hamilton

Ken Hamilton
 Director of Field Services

Encl.

c.c. WYFB Board
 NEK Chairmen Sweetwater, Lincoln, Uinta, Fremont & Sublette

P.O. Box 1348

Laramie, Wyoming 82070

Phone (307) 746-4856

Responses to Letter 363

1. See response to Comment 25-6 from Wind River Multiple Use Advocates.
2. The discussion on grazing management for the Raymond Mountain WSA and for other WSAs was changed in the Final EIS. The assumption that grazing management would not change was intended to say that it would not change as a result of wilderness designation, except as described in the EIS. If resource concerns indicate there is a need to change grazing management, it would be changed under both the All Wilderness and No Wilderness alternatives.
3. Wilderness management precludes timbering and may lead to a short-term buildup of fuels. However, wilderness management does not necessarily include measures to put out all fires as soon as they start, making the problem of fuel buildup worse. The exclusion of natural wild-fires is not part of wilderness management. The only WSA recommended for designation that is similar to the Yellowstone area is the Raymond Mountain WSA. It is the only WSA recommended with substantial timber resources.

The largest WSA recommended as suitable is 37,287 acres of the Honeycomb Buttes WSA (41,404 acres). When combined with the Oregon Buttes WSA it would be 42,987 acres. The Raymond Mountain WSA is 32,936 acres. These areas are too small, and except for the Raymond Mountain WSA lack the potential to attain sufficient fuel loading to result in problems of the magnitude experienced in the Yellowstone area during 1988. Section 4(d) of the Wilderness Act of 1964 states: "such measures may be necessary in the control of fire, insects and diseases, subject to such conditions as the Secretary deems desirable." This language enables BLM to develop fire management guidelines in the wilderness management plan. A "hands off" policy of fire control may not be appropriate.

4. The Final EIS provides more information on the economic value of potential oil and gas resources. See response to comments by Amoco Production Company (446). BLM believes wilderness designation may result in a minimal reduction in the number of wells drilled which would translate into a minimal social and economic impact. The maximum reduction in the number of wells drilled can be derived from the impact summary table at the front of the Final EIS. All WSAs designated wilderness would have no wells drilled, compared to the number of wells projected under the No Wilderness alternative. Since about 33 percent of the acreage recommended as suitable is in the Raymond Mountain WSA, this portion of the social and economic impact would be in a different area than the other 4 WSAs recommended under the Proposed Action.

The Wyoming Farm Bureau Federation would like to take this opportunity to comment on the Rock Springs District's Wilderness Environmental Impact Statement.

The Wyoming Farm Bureau Federation is a nonprofit organization dedicated to helping agricultural interests in the State of Wyoming. Our membership consists of some seven thousand Wyoming residents, 2,800 of which are actively engaged in production agriculture. These members have set Farm Bureau policy regarding public lands and wilderness issues.

Farm Bureau has long supported the multiple use doctrine of management on the federal lands in Wyoming. Our members believe multiple use is the only real way the state of Wyoming can retain an economic base for the future of its citizens.

Because of this the Wyoming Farm Bureau Federation supports the EIS's proposed action recommendation of no wilderness for the Loza Mountain Wilderness Study Area (WSA), Alkali Grove WSA, South Pingles WSA, Alkali Basin - Fort Sand Springs WSA, Red Lake WSA, Shilohmore Creek WSA, Devils Playground - Twin Buttes WSA and Red Creek Badlands WSA.

Farm Bureau objects to and cannot support the proposed action recommendation for the Raymond Mountain WSA, Buffalo Run WSA, Sand Dunes WSA, Honeycomb Buttes WSA, and Oregon Buttes WSA.

We will address specifics for our objections to these proposed actions individually.

RAYMOND MOUNTAIN WSA

Several things make the Raymond Mountain WSA proposed action recommendation infeasible.

The first of these is the need for acquisition of 200 acres of private land and 1,210 acres of state land within the wilderness boundary. The Wilderness Act of 1964 allows for acquisition of private land but requires the federal government to exchange with the state for state land. The issue of a land exchange for state land is not addressed in the Site Specific Chapter of the EIS. In the Assessment and Analysis Guidelines the EIS indicates that exchanges will be considered, however, the EIS indicates that in this particular case acquisition is the only option that was considered.

Also the 1964 Act allows the federal government to exchange with private land. The EIS in its Site Specific Chapter does not address this alternative.

The purchase of private land is predicated upon two occurrences. One is if the private landowner is willing to sell and the other is if Congress authorizes the acquisition. The EIS does not specify whether the landowner is willing to sell the land in the Raymond Mountain WSA. Lacking a private property owner willingness to sell land the government can acquire the land but Congress must specifically authorize the acquisition. The EIS does not explain what occurs if Congress does not authorize this acquisition.

We would submit that because of the amount of state and private land included in the Raymond Mountain WSA that the BLM cannot effectively

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range this area as a wilderness area and so should not recommend its inclusion as a wilderness since this violates the second criterion of the BLM's Wilderness Study Policy and Planning Criteria (F.R./Vol. 47, No. 23/ 5103).

The second problem with the Raymond Mountain WSA is the analysis of the effect wilderness designation would have on grazing. The EIS points out that one of the allotments in the WSA is in the "T" category. If the BLM is serious about improvement of the allotment then placing the allotment in wilderness will only exacerbate the problems facing the permittee and the BLM in trying to improve the allotment.

The EIS also fails to adequately assess the cumulative effects wilderness designation has on the allotment. The nonimpairment restriction will definitely add to the cost of any range improvements which will be necessary to raise the allotment category rating.

The EIS points out that there may be some potential problems with streambank vegetation caused by concentrated livestock use and increased pressure from recreationalists. These problems indicate that management steps may need to be taken to mitigate such problems. Wilderness designation will greatly increase problems associated with such mitigation measures if not entirely precluding some measures.

With the experience of the fire in the Greater Yellowstone Area this last summer the EIS needs to address the problems with water quality caused by hands off management of fires. Since wilderness designation precludes timbering the fuel load in some watersheds will build up which will eventually lead to fires. The impacts such removal of vegetation will have on water resources had not been addressed in the EIS at all.

Because of the lack of adequately assessing the impacts of wilderness designation on grazing resources and water resources the EIS has not met the standard of analyzing the "impacts on other resources".

We also question whether the EIS adequately addresses the social and economic effects of a wilderness designation.

Per Bureau recommends the no wilderness alternative.

BUFFALO HUMP WSA:

The basic assumption that the private and state lands within the recommended wilderness area will be acquired does not address the lands of what occurs if these lands are not acquired. Since the necessary State and private lands not be acquired then approximately 3.6 percent of the proposed wilderness area would remain in private or State ownership which would surely cause considerable problems for the BLM to manage the wilderness area effectively.

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The second problem with the Buffalo Hump WSA is the analysis of the cumulative effects wilderness designation will have on effective grazing management. Motorized vehicles would not be allowed within the proposed wilderness area. In the nonwilderness proposal the EIS points out that grazing management can continue with the benefit of motorized vehicles. Without the use of vehicles grazing costs for the allotment increase. The EIS does not indicate what category the allotment is within the proposed wilderness area, however, range improvement costs are necessarily more prohibitive in wilderness areas.

In BLM's definition of "naturalness" they say that a wilderness area should "generally appear to have been affected primarily by the forces of nature, with the imprint of man being of such a minor and/or unnoticeable" (F.R./Vol.47, No. 23/ 5103). The fact that a railroad bed is located on the eastern boundary of the proposed wilderness area would indicate that this area does not fit the criteria established for "naturalness".

Per Bureau recommends the no wilderness alternative.

SAND DUNES WSA:

It is unclear what the land askup for the Sand Dunes WSA is exactly. After re-reading the section in the Site-Specific Analysis section several times we are still left wondering if state and private land is involved in the proposed wilderness designation. The proposed action states:

The Proposed Action (Large Partial Wilderness) would be that 27,486 acres be recommended as suitable for wilderness designation (Map 8D-1). This total includes 21,184 acres of the 27,486-acre Sand Dunes WSA (composed of 20,164 acres of public land and 840 acres of state land), 877 acres of state land (not included in the original inventory), 17 acres of private land (not included in the original inventory), and 800 acres of split estate (federal surface, state interests) around Bear's Tusk. (Rock Springs Wilderness EIS, page 87. 2)

Later on in the same paragraph the following statement is found:

The private land and the 877 acres of state land are on and just outside the western boundary of the WSA, adjacent to the abandoned railroad bed.

Because of the confusion regarding whether state and private land may or may not be included in the proposed wilderness area it is difficult to analyze the impacts. It is also difficult to assess the manageability of the area should a portion of the area remain in state and private ownership.

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5. See response to Comment 363-1.
6. The railroad bed between the Sand Dunes and Buffalo Hump WSAs would detract somewhat from the area's naturalness. However, 2 factors are important to keep in mind in assessing the impacts to naturalness from the railroad bed. First, the bed is not noticeable from most of the WSA. Second, the sandy nature of the area would result in covering over of parts of the railroad bed, reducing the impacts to naturalness.
7. The Final EIS clarifies the description portion of the Sand Dunes WSA recommended as suitable for wilderness designation.
8. See response to Comment 6 of this letter.
10. See response to Comment 2 of this letter.
11. See response to Comment 2 of this letter.
12. The Final EIS contains added information and analysis on grazing. It also contains an added discussion on water rights.
13. The Final EIS contains added information on the economic value of potential oil and gas resources. It also contains added discussion on grazing management. Based on the analysis, BLM believes that if the WSAs recommended as suitable were designated wilderness, there would be only a minimal impact on local or regional economies or communities.
14. While the WSAs would be more manageable as wilderness if the private land were acquired, they would be manageable as wilderness and would be valuable additions to the National Wilderness Preservation System even if the private land were not acquired.
15. As pointed out earlier, the railroad bed is not noticeable from most of either the Sand Dunes or the Buffalo Hump WSAs and blowing sand will reduce its noticeability in many areas. See response to Comment 363-6.
16. BLM recognizes that techniques used in grazing management are different in some wilderness areas. The analysis was tailored to each WSA. In some WSAs the differences are more important than in others.
17. A discussion on water rights was added to the Final EIS.
18. See response to Comment 34 of this letter.
19. See response to Comment 14 of this letter.
20. BLM disagrees that naturalness is not met in the Sand Dunes and Buffalo Hump WSAs. See response to Comments 6 and 15 of this letter.

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It is noted that there is a railroad bed on the western boundary of the proposed wilderness area. This again leads to the question of "naturalness" of the proposed wilderness area. A railroad bed would suggest the area has features which have a substantially noticeable imprint of man's work.

The assessment of the effects of wilderness designation on grazing is substantially deficient. The cumulative effects do not appear to have been analyzed. The EIS acknowledged there are four livestock reservoirs within the WSA boundary and they make provisions for motorized equipment should it become necessary to work on them but the EIS does not discuss the potential economic impact of permittee maintenance of the reservoirs due to wilderness designation. Also an environmental analysis would be required before authorized equipment is allowed. There is no evaluation of the additional costs for the environmental analysis.

Wilderness designation will by inference preclude any additional grazing improvements which upset the "naturalness" of the area. These restrictions will add to the economic cost of the permittee and have not been addressed by the EIS.

Farm Bureau recommends the no wilderness alternative.

HONEYCROCK BUTTES WSA:

The EIS again does not address the cumulative effects of wilderness designation on grazing practices. The EIS points out that there are several reservoirs which are not functional in the area and in a state of disrepair. All but one of the reservoirs will not be repaired. No analysis is made of the need for future reservoir or other types of water development. The restrictions placed upon land uses in the proposed wilderness area will increase costs of operation for the permittee. Additional costs will occur for the BLM in processing requests for motorized equipment.

Farm Bureau recommends the no wilderness alternative.

OREGON BUTTES WSA:

The comments for the Honeycrock Buttes WSA apply to the Oregon Buttes WSA. In addition the EIS does not say what the allotment category is for grazing. It is noted that, "No additional range improvements are planned". This will have an economic effect on the permittee(s) which does not appear to have been analyzed in the EIS.

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Farm Bureau recommends the no wilderness alternative.

SUMMARY

The Wyoming Farm Bureau Federation recommends that the no wilderness designation be pursued for the Raymond Mountain WSA, Buffalo Jump WSA, Sand Dunes WSA, Honeycrock Buttes WSA and Oregon Buttes WSA.

The no wilderness designation for these areas should be pursued because:

1. They do not meet the criterion for "impacts on other resources". The cumulative effects of wilderness designation on grazing resources and water resources have not been adequately analyzed. Nothing is mentioned of water rights on these areas even though this is a critical element in assessing impact on other resources.
2. They do not meet the criterion for "local social and economic effects". The issue of how the land acquisitions proposed will affect local communities was not addressed. The issue of the cumulative effects on livestock grazing was not addressed.
3. They do not meet the criterion for "manageability". The issue of how the wilderness areas will be managed adequately if at all. The issue of how the BLM plans to manage these areas to protect the resources from devastation by natural occurrences such as the fires in Yellowstone was not addressed. The issue of water right acquisition was not considered in the manageability of the areas.
4. Two of the proposed wilderness areas do not meet the criterion of "naturalness". The issue of how a railroad bed with two ribbons of steel and ties creates an unnatural situation while the removal of the steel and ties causes the area to become natural was not addressed.

Wyoming Farm Bureau's members have become increasingly concerned about the additional burden wilderness designation places upon the permittee. There have been drastic reductions on the number of Adm's on Federal range in the past years which are a result of economic and natural factors. Many of the current rules and regulations which permittees must operate under have increased the costs of running livestock on the Federal ranges. Wilderness designation not only increases the upfront cost of operation but it also places restrictions on the land which will not allow any disturbance of naturalness. These restrictions many times require permittee to

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operate in an arena which is reminiscent of the 1800's. While these permittees are doing this, the livestock producers which have not had their permits placed in a wilderness area are able to take advantage of new technology and techniques which improve efficiency as well as range conditions. None of these factors appear to have been considered in the EIS document. One of the criterion for wilderness designation which was adopted by the BLM is the "Impact on Other Resources". This does not appear to have been done in this document in the proposed action which designates wilderness.

What happens to water and water rights is of vital concern to other resources. How the government chooses to administer the water in these areas has a critical bearing on the other resources. This issue was not addressed at all in the document and leaves the reader floating in a sea of ignorance as to the impacts it will create on other resources.

Recent fires in the Greater Yellowstone Area have pointed to the inability of federal agencies to adequately manage resources in areas where wilderness designation has occurred. Water and soil resources in the Greater Yellowstone Area have been gravely affected by the fires this past summer. Much of the area will contribute to water quality problems for years to come. None of the problems associated with wilderness designation such as limited access and limited management techniques appear to have been considered in the wilderness alternatives.

Totally excluded from consideration in the wilderness designation is the issue of wilderness water rights. Is or will the BLM seek to have reserve rights for water considered in the wilderness areas? If so, how much and for what purposes? These questions have not been answered by the EIS and must be answered before an adequate assessment of impacts on water resources can occur.

The land acquisition issue in the proposed wilderness areas was not adequately addressed by the EIS. Private and state land acquisitions were not explained. How does the BLM intend to acquire these lands. Will there be exchanges? Will the BLM seek to get specific authorization from Congress as well as an appropriation and condemn these lands? What will the economic costs to the state be when these lands are removed from the tax rolls? What will the cost be to the federal government? How will BLM manage the wilderness areas should the land acquisitions not occur? None of these questions have been answered by the EIS.

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The criterion of "naturalness" was not met in the two wilderness area proposals which contained railroad beds. There would not appear to be anything natural at all about a railroad bed in a wilderness area. The mere fact that these beds do not have two ribbons of steel and some railroad ties does not suggest the bed is a "natural" occurrence. To suggest that because the bed has been abandoned now fulfill the criterion of "naturalness" is not a reasonable suggestion.

Because of these reasons the areas listed should not be considered for wilderness designation.

Once again the Wyoming Farm Bureau Federation expresses support for the no wilderness recommendation for the Lake Mountain Wilderness Study Area, Alkali Flats WSA, South Pinecone WSA, Alkali Basin - East, Spud Run WSA, Red Lake WSA, Whitaborge Creek WSA, Devils Playground - Twin Buttes WSA and Red Creek Badlands WSA.

Thank you.
Ken Hamilton
Director of Field Services.

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EXXON COMPANY, U.S.A.

POST OFFICE BOX 1868 • WILMINGTON, TEXAS 75097-1868

EXXON COMPANY
 10000 WILMINGTON, TEXAS
 75097-1868

February 14, 1989

Mr. Alan Stein
 Rock Springs District
 Bureau of Land Management
 P. O. Box 1849
 Rock Springs, Wyoming 82902-1849

Dear Mr. Stein:

Exxon Company, U. S. A. appreciates this opportunity to comment on the Revised Draft Environmental Impact Statement (DEIS) for 13 Wilderness Study Areas (WSAs) in the Bureau of Land Management's Rock Springs District. Our interest in the Bureau of Land Management's (BLM) Wilderness Study Areas program stems from our belief that some of the lands under consideration for wilderness designation also have significant potential for oil and gas production.

Assessment of Mineral Potential

We have reviewed the BLM's evaluations of the oil and gas potential for the 13 WSAs. We believe the BLM is to be commended for its examination of the subsurface mineral potential in each of the WSAs and its presentation of relevant facts for review in the DEIS. In our view, the BLM has adequately reviewed and assessed the subsurface mineral occurrence for the WSAs.

Exxon is in agreement with the Bureau's assessment of oil and gas potential for all 13 of the WSAs. We also support the BLM's recommendations that 8 of the WSAs are not suitable for wilderness designation. These WSAs are Lake Mountain, Alkali Draw, South Pinnacle, Alkali Basin-East Sand Dunes, Red Lake, Whitehorse Creek, Devil's Playground-Twin Buttes, and Red Creek Redlands.

Wilderness Recommendation

We are deeply disturbed, however, about the Bureau's decision to recommend five WSAs as suitable for wilderness even though they are acknowledged to be capable of production of natural gas, and lack of consideration in the DEIS of the economic impacts this decision may have. Four of these WSAs are in the Green River Basin (Buffalo Bump, Sand Dunes, Honeycomb Buttes, and Oregon Buttes) and one is in the Overthrust Belt (Seymour Mountains). In our view, the economic impacts resulting from loss of opportunity to produce the natural gas resource should be disclosed in the DEIS and, further, these economic impacts should be considered as an issue in the Bureau's decision for wilderness suitability.

A DIVISION OF EXXON CORPORATION

Responses to Letter 367

1. See response to Comment 446 (Amoco Production Company) on the economics of the potential oil and gas reserves foregone if the WSAs are designated wilderness. There were 5 WSAs recommended as suitable for wilderness designation. Economic factors are important considerations in determining if they should be designated. However, it is far from a certainty that the estimates of production would be realized if all the WSAs are open to leasing. The estimates are for potential reserves, not proven reserves. Some oil and gas, and economic benefits would be foregone if all 5 WSAs recommended as suitable are designated. But the cumulative reserves of all 5 WSAs would most likely not be realized even if none of the WSAs are designated.

2. The language which may have lead to a misconception that the WSAs are of no interest to the mineral industry was clarified in the Final EIS. The Final EIS points out that the WSAs are currently unleased because there has been a prohibition on leasing during interim management of the WSAs.

The Final EIS retains the language which indicates that the low level of drilling in the WSAs, when they were leased, indicates they are not high priority areas for industry. Earlier, the WSAs were leased with a potential for being designated wilderness. If existing leases expire before a WSA is designated, a leaseholder (at their option) would forego the opportunity to explore for oil and gas because the WSA would not be offered for lease again. Since the leaseholders did not exercise their option to explore for oil and gas when they had it, BLM can only assume the WSAs are not high priority areas.

3. Lost opportunities for exploration and production are reflected in the unleased acreage and in the estimates of potential production foregone. We have estimated the number of wells that would be drilled in each WSA if it were left open to leasing and development. We continue to believe that the likelihood that a field would be discovered wholly within a WSA is very low. Consequently, if an area is geologically prospectively valuable, exploration would be likely to take place outside the boundaries of the WSA even if it is designated wilderness.
4. BLM agrees that industry has demonstrated an ability to conduct oil and gas operations in an environmentally acceptable manner. That is not the issue in this EIS. Oil and gas operations are not compatible with wilderness management.

Mr. Alan Stein
 February 14, 1989
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Oil and Gas Economic Impacts

The need to disclose economic impacts which may be experienced is underscored by the magnitude of the forgoable opportunities. Using the BLM's own estimates, [50 billion cubic feet (BCF) of gas per acre in the Raymond Mountain (p. 46), and 3.12 BCF per 640 acres in the Green River Basin (p. 59)] we find that at up to 503 billion cubic feet of natural gas would be foregone if these five WSAs were designated as wilderness. Based on a current average contract price of \$1.25 per thousand cubic feet of natural gas sold in southeast Wyoming, the total estimated value of the gas that would be foregone if the WSAs are designated wilderness is \$628,750,000.

Lease bonus and lease rental income are other examples of economic impacts which should have been disclosed in the DEIS. However, since the DEIS should make it clear that there is a prohibition against leasing new leases in WSAs at the present time, and that this is the reason why there is unleased acreage within the WSAs, the language in the DEIS doesn't make this clear and may lead some readers to believe that the WSAs are of no interest to the oil and gas industry. Far from it, we believe that the lease bonus for these tracts, if they were available, would be significant because of the potential for production in the WSAs.

Issues Considered But Not Analyzed

We take issue with several statements made on pages 18 and 19 of the DEIS. "Several concerns were determined not to be issues because they would not affect or be affected by wilderness or nonwilderness decisions." Social and economic resources are included in this list and they "were not analyzed because....drilling would take place in the vicinity of a WSA if it could not take place in the WSA. This would result in little or no change in the availability of jobs or oil and gas revenues to the state and country."

In our view, these statements in the DEIS are misleading and are factually incorrect because they ignore geological limitations on production opportunities and the fact that economic benefits of oil and gas are inextricably tied to leasing. Exxon believes the Bureau's recommendation to permanently withdraw 109,347 acres of potentially productive public lands from leasing is a decision accompanied by an analysis of economic impacts as required by the Bureau's wilderness study policy and planning criteria: Quality Standard No. 1 addresses Energy and Mineral Resource Values, No. 2 addresses Impacts on Other Resources, No. 4 addresses Public Comment, and No. 5 is explicit in addressing Local Social and Economic Effects.

Mr. Alan Stein
February 14, 1989
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SUMMARY

Because of the permanent nature of wilderness decisions and in view of the potential for production of hydrocarbon resources from the subject WSAs, we believe the Bureau should reconsider its initial recommendation that 3 of the 13 WSAs studied are suitable for wilderness. In our view the economic benefits which may be realized if the WSAs remain open to non-wilderness management should be a key part of the Revised Wilderness EIS.

Finally, and from our own experience in working in environmentally sensitive areas including BLM wilderness study areas, we firmly believe that wilderness and multiple use are not mutually exclusive decisions. We believe the record of performance established by the Bureau of Land Management and the industry is very positive, and demonstrates their ability to work together and compatibly with other public land uses and values.

Thank you for the opportunity to comment and your consideration of our views. Please do not hesitate to contact Mr. Fernando Blackspot of my staff at (303) 752-7488 if you have any questions about our comments or if we can provide additional information.

Sincerely,



cc: Mr. T. E. Alford
Mr. A. J. Benitez, NROGA
Mr. C. M. Dunbar
Mr. W. M. Frounfar, FAW
Mr. E. D. Goddard
Mr. J. M. Mueselinger
Mr. J. E. McConomy

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416

Response to Letter 416

The BLM started an RMP for the Green River Resource Area which includes part of the Red Desert. The BLM recognizes the concern over management of the Red Desert and intends to develop management direction for the part of the Red Desert in the Green River Resource Area in the RMP. Whether that management will mean a special designation for the Red Desert area, or parts of it, has not been decided. Your involvement in the RMP would be appreciated.



THE WILDERNESS SOCIETY

February 9, 1989

Mr. Alan Stein
Assistant District Manager
Rock Springs District
BLM
P.O. Box 1869
Rock Springs, WY 82902

Dear Mr. Stein:

We appreciate the opportunity to submit our comments on the Rock Springs Wilderness Revised Draft Environmental Impact Statement.

We believe your agency's wilderness recommendation is woefully inadequate. Of the 13 wilderness study areas in your district, only five were recommended for wilderness - a mere 1.8% of the 3.7 million acres studied. The Wilderness Society, along with other conservation groups, supports wilderness designation for all 13 areas in the Red Desert and nearby lands.

While we appreciate the BLM's recommendation to designate as wilderness the Raymond Mountain and Crook's Buttes WSAs and part of the Honeycomb Buttes, Sand Dunes and Buffalo Rump WSAs, the recommendation does not go far enough. We urge you to support designation of the ENTIRE Honeycomb Buttes, Sand Dunes and Buffalo Rump WSAs, rather than the current proposal of partial recommendations.

Additionally, we urge you to include the following areas in your wilderness recommendations:

- Lake Mountain
- Whitehorse Creek
- Alkali Draw
- South Pinnacles
- Alkali Basin/East Sand Dunes
- Red Lake
- Devil's Playground
- Red Creek Meadows

NORTHERN ROCKIES REGIONAL OFFICE
125 W. MAIN STREET, SUITE 8, BOZEMAN, MT 59715
(406) 552-1000

The 5.7 million acres that were studied include some of the nation's most spectacular desert lands. These lands contain outstanding geologic, cultural and wildlife resources. The Red Desert's uniqueness must be protected and managed as a single entity - not as small islands of wilderness in a sea of roads, pipelines and oil wells. We urge the BLM to initiate a proposal for the Red Desert that would manage the lands as one, cohesive national conservation unit. This type of management approach may be the key to preserving the best of the remaining roadless lands in south-western Wyoming.

Again, thank you for the opportunity to submit our comments.

Sincerely,

 Sandy McInnes
 Regional Associate
 Northern Rockies



SWEETWATER COUNTY
 WILDLIFE ASSOCIATION

ROCK SPRINGS, WYOMING 82401
 February 8, 1989

Mr. Al Stein
 Bureau of Land Management
 P.O. Box 2489
 Rock Springs, Wyo. 82902-1869

Dear Mr. Stein:

Sweetwater County Wildlife Association Board of Directors has reviewed BLM's revised Wilderness EIS and offers the following comments.

Previously, our organization provided oral and written testimony that concerned these study areas. Upon review, we believe this data to still be relevant.

It appears, searching among the 6 million acres of public land in the Rock Springs BLM District for unspoiled, natural areas that offer solitude, a "like searching for a needle in a haystack." Your study points out, quite vividly, that we who inhabit this land for a short time, have been most everywhere with our dozers, drills, hoses, and exploration. Which should surely tip the scales in favor of protection through the wilderness system of what little we have left.

We were pleased to learn that Buffalo Hump was added to proposed wilderness areas. Not only is this area badly needed to round-out the Sand Dune ecosystem, it will also help to delineate wilderness boundaries. Only the abandoned rail bed reveals that man has been there - but this will erode, grow over, and become next to invisible.

Buffalo Hump and the Sand Dunes are much more than just a pile of moving sand. Dune pools provide habitat for a great many creatures and drinking water for many more. The Steamboat elk herd once grazed and bedded around the dune pools - until the dune buggies drove them out. Now the elk are beginning to come back.

The dune area is an ideal place to teach students the workings of ecosystems. From limber pine and aspen communities on Steamboat, it's a short distance down into the erid sagebrush, sand country. We are fortunate to have such a place. Without doubt, Buffalo Hump and the Sand Dunes should be proposed by BLM for wilderness designation.

Reasons you provided for not including the Red Creek badlands in your wilderness proposals were quite unclear. You tired off all the reason why this area qualified - and it does - and then decided not to recommend it. We disagree. The Red Creek area provides acres of solitude, naturalness, scenery. It's a fragile site, and an important watershed. The only lands we have to protect this area is through the Wilderness Act. We ask that you propose this area for wilderness.

Responses to Letter 420

1. BLM recognizes the excellent opportunities for environmental education in this area and would be glad to work with anyone interested in pursuing these efforts.
2. Red Creek Badlands - The Red Creek WSA is part of the much larger Red Creek ACEC. The management plan for the ACEC provides adequate protection for this important watershed.

If you begin counting people who have hiked through the Honeycombe mine - there aren't any. But those who have been there never forget. These badlands have no peer. Mineral deposits have attracted the Honeycombe with beautiful colors. There is no rim of reason for their convoluted layout. One can wander for hours among the Honeycombe and not know for sure which direction is north.

The Honeycombe are pristine, and offer about as much solitude as you can find anywhere. The addition of a portion of Oregon Butte to proposed wilderness system was welcome. Certainly, these areas should be preserved, for our kids, and theirs.

Raymond Mountain is a place to get away from it all. It provides habitat for a wealth of wildlife that will be severely impacted if logging and oil exploration and production is allowed. We have problems trying to understand why special interests feel they are entitled to do their thing on every square foot of public land - and become quite annoyed if someone suggests that we set a bit aside.

If progress means cutting it down, doing it under, digging it up, all for the almighty dollar - where do we go to find the solitude, the naturalness, the places that remain mostly as they were when we began conquering the West? In our judgment, Raymond Mountain should become part of our Wilderness system.

Thank you for the opportunity to comment on this important issue.

Larry Gillinger

Larry Gillinger, President
Deweywater County Wildlife Association
P.O. Box 1233
Rock Springs, Wyoming 82901

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OREGON-CALIFORNIA TRAILS ASSOCIATION

111 East Maple St., P.O. Box 1019 / Independence MO 64051-0119
(816) 252-9276



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La Barge, WY
Feb. 10, 1985

Bureau of Land Management
Rock Springs District
P.O. Box 1869
Rock Springs, Wyoming 82902-1869

Attn: Mr. Alan Stein

Dear Alan:

This is in response to the Revised Environmental Impact Statement Wilderness Study.

There is little to respond to from our Organization due to the limited amount of Historic Trails involved.

There is some minor trail segment in the Raymond Mountain section of portions and I see no mention in the report of any Historic Resource considerations for this item. It may be that it is already destroyed or otherwise damaged to a point beyond consideration such as U.S. Highway 10 being on top of the original routing in this area. There are some segments on private lands nearby.

The other area would be in the vicinity of South Pass and portions of the Wilderness proposal are adjacent to the Trail corridor. Again there is no mention of Cultural Resources in the Study proposed.

Other than the two areas mentioned there appears to be no conflict between the proposal and the Historic Trails in western Wyoming.

Should maps with more detail show a conflict we would be more than delighted to make a field trip and review same with your representatives for protective considerations of the resource.

We offer our assistance at any time to your department in protecting this Historic Resource.

Sincerely,

Karen Buck
Karen Buck, Director &
Asst. Preservation Officer

Karen Buck
Karen Buck, Director

Response to Letter 432

Thank you for the information on trails. Should any of the WSAs not be designated wilderness, all decisions on authorized activities would take cultural resources into account. We believe this would eliminate or mitigate impacts to cultural resources. However, unauthorized or dispersed recreation, including unauthorized collection, may continue to adversely impact cultural resources. There are no substantial differences between wilderness and nonwilderness in this regard.



FRIENDS OF

WILD WYOMING DESERTS

Route 62 Box 12-B
Atlantic City, Wyoming 82930

January 7, 1989

Alan Stein
Bank Springs District
Bureau of Land Management
P.O. Box 1849
Bank Springs, Wyoming 82902

Dear Mr. Stein:

Thank you for the opportunity to comment in support of Wyoming's wildlands regarding the Revised Draft Wilderness Environmental Impact Statement for the Final Alternative Management Plan of the Friends of Wild Wyoming Deserts. I congratulate BLM for recommending 106,427 acres for inclusion in the National Wilderness Preservation System. However, I find the draft contains numerous errors, inconsistencies and an overall bias against wilderness preservation. Before I make any comments on the BLM report, I would like to see the Wilderness Study Areas (WSAs), reevaluate the worth of these unique sites, and support their protection through Wilderness designation. Maximum protection would be assured by an up Wilderness recommendation for each of the 13 WSAs, and additions of 226 acres and 1254 acres in Buffalo Hump and Sand Dunes WSAs, respectively.

As a former BLM employee and current applicant of another natural resource agency, I know well BLM's mandate for multiple-use management of public lands. Through the Federal Land Policy and Management Act of 1976, BLM is directed to provide this nation citizens with a multitude of opportunities, including wildlife, mineral and timber production, livestock grazing, fisheries and wildlife, and primitive and developed recreation. Focusing my work experience in Wyoming, I find that BLM has more than adequately provided for the development and production end of the mandate, with its failure to protect our opportunities to enjoy wildlife and unspoiled scenery. For example, BLM has not provided effective safeguards for the WSAs. As of this fall, Honeycomb Buttes showed evidence of vehicle trespass on the south and southeast sides, and Alkali Dune, South Flamingo, Red Lake, and Alkali Basin-East Sand Dunes had no visible WSA boundary signs.

Virtually all of the public land in the Rock Springs District is open to grazing, oil and gas production, and motorized recreation, yet less than 2 percent is recommended for protection as wilderness. Even if every WSA in the district were recommended, only about 4 percent of Federal Lands there would be increased to areas free from powerlines, roads, and seismic trails. As a whole, Wyoming has the

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Responses to Letter 434

1. General - The Final EIS contains a better analysis and description of the alternatives and potential impacts. This should help the public better understand the reasons for the suitability or nonsuitability recommendations. As you point out, some WSAs contain unique habitat types. Important among these are the Sand Dunes and Buffalo Hump WSAs.
2. The recommendation for the Devils Playground - Twin Buttes WSA was changed to suitable for designation because most of the intrusions are healing and the effects on naturalness are now minimal. Cultural resources are abundant and would be better protected by wilderness designation than by multiple use management.
3. The Bureau recognizes that there is limited use of most WSAs for backcountry recreation. The statement that there is no such use has been changed to reflect the fact that such use exists but the number of visitor days spent in this type of recreation is relatively low.
4. The Rock Creek drainage would have No Surface Occupancy (NSO) stipulations on oil and gas leases under nonwilderness. The recent Pinedale RMP contains guidance which states that the crucial winter range for the naturally wintering herd of elk will be protected. A study is underway to identify the area needing the most protection. The figure of 4.3 percent is for pre-FLPMA leases only. Post-FLPMA leases exist but they have NSO stipulations.

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Desert Friends DEIS comments

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lower acreage of recommended BLM Wilderness in the nation, yet many outstanding areas have not been included.

Although principal BLM manager responsible for writing the EIS, including you—the Team Leader, and your Assistant Team Leader Bill McQueen, have not visited all the WSAs, you claim that eight primitive areas are undeveloped or Wilderness status. I have hiked and camped in each WSA—in all thirteen areas. I found solitude, primitive landscapes, and striking natural beauty. Each undeveloped protection that Wilderness provides for present and future generations. Also, although BLM does not address the issue in the draft, I believe each site contains unique biological resources. BLM currently represented in the National Wilderness Preservation System.

The WSAs not included in the current Wilderness proposal are: **Devils Playground/Twin Buttes** (6,441 acres)—an area of increasing baldness and rock outcrops west of Flaming Gorge; the site contains other evidence of early humans, fossil deposits, and deer and elk tracks. On page 18 of the DEIS, BLM states "Current information does not indicate any unique cultural resources in the WSA." However on pages 18 and 111, the DEIS elaborates on cliff rock dating 2500 years old, and a nearby composite which has been dated to 9000 years old—these sites are "unusual in southeast Wyoming and are considered significant cultural resources." Also, BLM (DEIS p. 11) claims that two-track ways make a "Partial wilderness Alternative 'difficult.'" Yet the Draft (p. 14) states "Partial trails and two-track trails . . . do not detract from the overall natural character of the WSA." After spending a week in this area in the fall of 1986, I know that any or all of it could and should be managed as Wilderness.

Red Rock (8,640 acres)—highly scenic red badlands consisting of a fragile weathered sandstone (Flaming Gorge); the north-south-most stands of piñon pine, critical deer winter range, elk, antelope, pronghorn, bobcats, and raptors all occur here. BLM claims (DEIS p. 146) that the area "does not receive any wilderness use." I have backpacked and camped in the area myself—living proof that it is valuable for wilderness recreation. Apparently the Bureau has lost sight of the site track and refuses to recognize the worth of this area.

Lake Mountain (13,885 acres)—ridges and cranks in the Wyoming Range west of Laramie; it contains rare Colorado trout trout, winter range for one of the last naturally wintering elk herds in western Wyoming, deer feeding areas and critical winter range, beaver, lynx, pika, blue grouse, waterfowl, bear, and excellent moose, elk, and deer hunting. Here does and fish habitat are abundant. If the area is further developed, we doubt existing numbers of animals can be supported." BLM has disregarded the outstanding values of Lake Mountain, and makes error in the DEIS for non-designation. For example, BLM claims (p. 30) that 11 percent of the WSA acreage is under production for oil and gas. However, on page 29, BLM states that only 600 acres (4.3%) are even leased of this acreage, it is unclear how much, if any, is actually disturbed or in production.

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Desert Friends DEIS comments

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Whitehorse Creek (4,002 acres)—on the western border of Oregon Buttes WSA. This unit contains badlands, sages and pine groves, and sandstone cliffs; petrified wood, agate beds, snail and clam fossils, mountain lions, bobcats, deer, antelope, horses, coyotes, weaver squirrels, and one of the last suitable calving areas for our state's only desert elk herd are found here. We question why BLM has not recommended to identify and analyze a reasonable Partial Wilderness alternative." Yet the area defines a 5,700-acre WSA—in effect increasing the size of the area and helping to ensure the integrity of both areas' wilderness characteristics. BLM states (p.8) that an all-Wilderness designation would increase deer and elk numbers and nonrecreational recreation by about 25 percent—so there is plainly a demand for this type of opportunity.

Red Lake (9,515 acres)—in the heart of the Great Divide Basin, and noted for seasonally flooded wet and flats, this unit also has bad dunes; as an unspoiled remnant of the Bad Desert, it was recommended for primitive area designation by BLM in 1979; wintering desert elk, wild horses, coyotes, bobcats, and pronghorn antelope occur in the unit, along with crucial deer winter range. The sharp boundaries of the wind channel which has formed dunes here and in the adjacent Alkali Basin-East Sand Dunes WSA make these areas scientifically important in terms of basic wind current studies. According to a prominent Wyoming geologist, "these are types of dunes here which have never been studied and if we are to understand fierce wind environment and the effect of windlift of all kinds, we need to collect basic data and protect these areas."

Alkali Basin-East Sand Dunes (12,800 acres)—adjacent Red Lake WSA's western border. This unit includes parts of the Fillmore Sand Dunes and an unspoiled remnant of the Bad Desert; wildlife antelope habitat, elk winter range, coyotes, bobcats, wild horses, and early human artifacts are within the area. Apparently, BLM is not recommending this WSA for Wilderness because "it is relatively flat and the opportunities for solitude are limited (DFF-10-10)." Despite their FLPPA mandate, BLM managers continue to postpone their review with the notion that only forests and mountains can truly be worthy as Wilderness Areas. DFF maps show the most of the area is characterized by large sand dunes, dunes, and ridges. BLM, in a Final Inventory Report of the state's WSA's, wrote that these topographic features "provide excellent natural screening from the sight and sound of others." In an oral visit to the area, I find that solitude and natural beauty prevail.

Alkali Draw (17,630 acres)—this wide basin is bounded by colorful purple cliffs and lies northeast of Fremont Mountain; it contains small caves, Paleocene fossils, crucial elk and deer winter range.

Desert Friends DEIS comment

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end antelope habitat. According to BLM's Final Inventory Report, and consistent with my own recent observations, "splendid opportunities for primitive and unspoiled recreation are available within the unit. Man-made structures...are substantially unnoticeable and all are undergoing natural revegetation." In the Draft, BLM gives no clear rationale for a no Wilderness recommendation—the only hint is a reference to pre-FLPPA oil and gas leases (pp.17,20,22). "We see these leases still and lease after December 31, 1984." BLM rights no activity on the leases, but does state that they cover 18 percent of the WSA (p.20). On page 18 of the Draft, the actual acreage is given—2,705 acres covered by pre-FLPPA leases, which is only 0.3 percent. Once again, BLM appears to be segregating a WSA without clear cause or explanation.

South Pinnacles (10,800 acres)—just east of Alkali Draw, in the Bad Desert, this unit is home to antelope, deer, elk, and a large dose of prairie dog(s) to define spectacular views of the desert and surrounding landscape including Fremont Mountain and Alkali Butte. From my own experience I find this a wild and lovely land, yet BLM managers plainly do not know the fundamental resources there. On page 94 of the Draft, they state "The WSA contains important habitat for mule deer and elk." Then four paragraphs later, they say "Occasional elk and mule deer may enter the area but they are not important for these animals." It is hard to have much faith in our public land management, when the manager's apparently lacks an understanding of the area.

Of these sites not recommended, only Lake Mountain has "relatively large" recoverable reserves of oil and gas, although a potential for oil and gas development does not preclude a site from Wilderness status. According to the Draft, the other seven WSAs have no or low potential for oil and gas development, and no significant unexchange minerals. Livestock grazing in each area would continue unchanged with Wilderness designation, and leases could use mechanical vehicles and equipment for maintenance as they have in the past.

The Draft EIS states that each WSA meets the criteria (for Wilderness) established in the Wilderness Act of 1964—naturalness, opportunities for solitude and primitive and unspoiled recreation, and a size of at least 5,000 acres, or sufficient size to make practicable its preservation. Although Wilderness status would feature enhanced protection for special resources in each area, BLM states no clear rationale in the draft for excluding these eight units.

In the Draft, BLM recommends that all of Beyond Mountain and Oregon Buttes WSAs, and most of Honeycomb Buttes, Sand Dunes, and Red Lake WSA be included in the National Wilderness Preservation System. Collectively these sites feature rugged canyons and cliffs, badlands, and portions of the longest chain of sand dunes in North America. They provide habitat for bald eagles, peregrine falcons, nesting

8. Pre-FLPPA leases, held by production, continue to cover approximately 18 percent of the Alkali Draw WSA. These leases and the existing roads and trails in the WSA make it unsuitable for wilderness designation. The site-specific analysis for the Alkali Draw WSA in the Final EIS more clearly describes this rationale.
9. The information on wildlife for the South Pinnacles WSA has been changed in the Final EIS.
10. Areas Not Recommended as Suitable for Wilderness Designation - BLM agrees that a potential for oil and gas development does not preclude a site from wilderness status. Some individuals feel that oil and gas potential should lead us to recommend that a WSA not be recommended for wilderness designation. The BLM recommends areas which are suitable for wilderness designation. Tradeoffs regarding oil and gas resources and wilderness designation will be made by Congress (see response to Exxon Company U.S.A., Midland, Texas, Comment 387-1. Conversely, the presence of low or no oil and gas potential does not lead BLM to automatically recommend that a WSA be designated.
11. Sand Dunes - The Larger Partial Wilderness alternative is 6,158 acres more (38 percent) than the Partial Wilderness recommendation in the 1983 Draft EIS. The Final EIS was changed to reflect this correction. The Revised Draft and Final EISs indicate that the oil and gas potential in the Sand Dunes WSA is greatest in the eastern part of the WSA and least in the western part. When proposals for individual wells or roads are submitted, we would analyze them and may relocate well sites or access roads to avoid areas with potential conflicts.
13. Railroad bed - The right-of-way has not been relinquished. Since the rails were removed, BLM requested an abandonment plan from the right-of-way holder. When it is received, BLM will decide what will happen to the railroad bed.
14. Honeycomb Buttes - The Final EIS was changed to more clearly describe why the northern part of the Honeycomb Buttes WSA was not recommended for wilderness designation. Pre-FLPPA oil and gas leases were not a factor in this determination.

Desert Friends DMS comments

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waterfowl and sandhill cranes, rare Bonnaville cutthroat trout, deer, elk, moose, antelope, mountain lions, bobcats, coyotes, and many other species. Visitors to these areas find spectacular scenery, fossils, caves, and evidence of early humans. Desert Friends would wholeheartedly support All-Wilderness recommendations for these WAs. However, the Draft contains some inaccuracies about the areas that should be clarified or amended.

Spad Dunes (23,309 acres)

The DMS (pp.47-74) states "This Large Partial Wilderness Alternative (of 21,438 acres) recommends 12,138 acres more than the Partial Wilderness Alternative described in the first draft DMS." Yet the first DMS recommended 16,200 acres--the new recommendation is only 4,138 acres more than the old one. Perhaps you meant to recommend 12,138 additional acres for a total of 28,438--which is very close to Desert Friends proposal of 28,563 acres. I hope this is the case.

By increasing your recommendation from Large Partial to All-Wilderness plus 1,236 acres, the manageability of the area would be greatly increased, while the potential of additional gas foregone would be only 31 MCF. The area left out of your proposal is not terribly valuable in terms of natural gas production.

The Draft (p.73) lists a high development potential area for oil wells in the WAs. But the legal locations given there are east of the WAs boundary by several miles.

RM also states in the Draft (p.73) that new oil and gas leases for the parts of the Sand Dunes not recommended for Wilderness would be conditioned to restrict disturbance within 200 feet of live water. How will RM implement such restrictions in shifting sands where ponds appear and disappear from one year to the next?

Buffalo Hump (10,300 acres)

RM proposes Partial Wilderness, including 226 acres outside of the WAs boundary, but did not write an All-Wilderness plus 226 acres alternative. As we see it, this option would greatly enhance the wilderness manageability of the area, and should have been included in the Draft.

Why does RM state that All or Partial Wilderness designation will cause a decrease of hunter and visitor days here (pp.43,64), but increase in the Sand Dunes WAs which borders this one (p.48)? Have you conducted studies on the recreation use of both areas? Since RM claims this decrease will be due largely to closure of the railroad bed, is this based on a documented recreation use increase in 1987 over 1983 levels, when the rails were still in place? Judging from RM's apparent lack of first-hand knowledge of the WAs, and my own work experience creating RM recreation use data, I doubt that your claims of use changes are justified.

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Desert Friends DMS comments

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In regard to the railroad track running between Buffalo Hump and Sand Dunes WAs, why was it left open to become a road after the rails were removed in the summer of 1986? In the interest of protecting these two WAs, RM should have closed the grade then.

Honeycomb Buttes (41,044 acres)

In such an outstanding area of basinal topography, why is RM not recommending the entire unit? Why are the leases on 4,117 acres (the part that is not recommended) still an issue 2 years after the expiration of pre-TPMA leases? I found the oil and gas information on this area sketchy and not a clear reason for failing to designate the whole WAs Wilderness. I know from first-hand experience that the entire unit is wild and spectacular country.

By designating all thirteen of these areas as Wilderness, RM would be providing a drawing card for the state, and assuring our residents that a small part of our wealth will always be protected. Thank you for incorporating these comments in your Wilderness Review. I look forward to seeing the Final DMS.

Most sincerely,

Lynn Kister
Lynn Kister
Director

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cc:
Senator Alan Simpson
Senator Melnick Wallip
Representative Richard Cheney
Governor Mike Sullivan
RM State Director Stubbler

Thank you for your comments.



CELSIUS ENERGY COMPANY

19 SOUTH MAIN STREET • P. O. BOX 1070 • SALT LAKE CITY, UTAH 84147 • PHONE (801) 532-2000

February 9, 1989

Mr. Alan Stein
 Rock Springs District
 Bureau of Land Management
 P.O. Box 1809
 Rock Springs, WY 82902-1809

Dear Sir:

Re: Revised Draft Wilderness Environmental Impact
 Statement Issued by Rock Springs District.

Celsius Energy Company hereby submits its comments to the above referenced Revised Draft Wilderness Environmental Impact Statement issued on July 27, 1988 by the Rock Springs District Office, Bureau of Land Management, U.S. Department of Interior. Celsius is an oil and gas producer with operations in the state of Wyoming and is interested in the prudent development of oil and gas reserves located in the referenced Wilderness Study Areas (WSA's).

With respect to the Sand Dunes Wilderness Study Area, Celsius recommends that this area not be designated a wilderness area. According to your draft EIS, such a designation would permanently preclude the development of 142 Bcf of gas and 200,000 bbls of condensate. Nevertheless, you conclude that oil and gas development would be inconsistent with wilderness values because "[i]t would be gone in most of the USA." *Id.* at page 83. We believe that oil and gas development can be planned and spaced to minimize its effect on solitude and still reap the benefits of the substantial energy reserves.

For the same reasons, we recommend that the Honeycomb Buttes Wilderness Study Area not be designated a wilderness area. Per your report, such a designation would result in permanent loss of 64 Bcf of gas. We particularly object to a wilderness designation in the absence of a finding that current plans for oil and gas exploration poses a threat to wilderness values. It is not sufficient, in our opinion, to designate a wilderness area based upon what might occur in the remote future.

With respect to the Raymond Mountain Wilderness Study Area, we urge BLM to forego a wilderness designation in favor of carefully administered multiple use management. We commend the BLM in its conclusion that "[c]ontrol of the rate of development would help to mitigate" impact to water quality for the fish population in this WSA. Again, we are confident that wise selection of drill sites, and proper reclamation can mitigate problems of erosion and sedimentation.

We are pleased that the BLM included in its draft EIS as Appendix A the important findings concerning the public's attitude toward wilderness

Mr. Alan Stein
 February 9, 1989
 Page 2

designations. As you have reported, there is "public antipathy toward additional wilderness in Wyoming, especially on BLM administered land." Various surveys concur that a substantial majority of the residents of Wyoming favor energy development in potential wilderness areas. We agree with BLM's conclusion that "[c]areful consideration of public attitudes and values should be an integral part of any wilderness decisions." *Id.* at p. 136. However, the BLM's proposed wilderness designations for the Sand Dunes, Honeycomb Buttes, and Raymond Mountain Areas are not consistent with the predominant public opinion in support of energy development in WSA's which have potential for oil and gas development. Further, to permanently foreclose development of these energy-rich lands is contrary to our national interests for energy self-sufficiency and domestic security.

The average Wyoming residential gas customer of Mountain Fuel Supply Company uses 120 decatherms of gas per year. That equals 110.15 Mcf of gas per year. Mountain Fuel's 20,000 customers in Southwest Wyoming use a total of approximately 6 Bcf of gas per year. Stated another way, the amount of gas you are saying will be lost is sufficient to heat all of Mountain Fuel's customers' homes and businesses in Southwest Wyoming (Evanston, Fort Bridger, Mountain View, Green River, and Rock Springs, etc.) for over ten years. The amount of 142 Bcf is sufficient to heat 20,000 typical homes for over 50 years, what a terrible loss to our country. Please include this data in the Mineral Section of your final EIS discussion.

Please reconsider your proposal to designate the above referenced wilderness study areas as wilderness areas. We urge you to allow these areas to remain open to energy development under the BLM's multiple use management program.

Respectfully submitted,

Thomas C. Jeppesen
 Thomas C. Jeppesen
 Attorney

pf

cc: BNSDA
 1809 Lincoln Street
 Suite 404
 Denver, CO 80295
 Attn: Alice Benitz



Neil W. Allen
Deputy Commissioner
Department of Environmental and Natural Resources
February 9, 1989

Mr. Al Stein
Bureau of Land Management
PO Box 1869
Rock Springs, Wyoming 82802-1869

File: WWA-282-032

Wilderness Suitability Study

Anoco Production Company, a wholly owned subsidiary of Anoco Corporation, is incorporated for the purpose of exploring for and developing oil and gas resources. We have both operations and leasehold within the Mook Springs District and, as a result, have great interest in the subject draft EIS/Wilderness analysis. Anoco appreciates the opportunity to comment on the document.

Anoco supports the recommendation for nonwilderness applicable to Lake Mountain, Buffalo Hump, Sand Dunes, Honeycomb Buttes, and Oregon Buttes as WSA's considering that potential energy resources on 105,342 acres will never be realized. While reserve estimates for most of the areas are provided, the environmental consequences analysis does not include economic estimates for the loss to the federal treasury, local governments and the general economy when mineral activities in these areas are eliminated. To perform this analysis, it is recommended DOE price forecasts be utilized so that quantitative economic figures are documented on potentially lost oil and gas reserves. The justification for wilderness does not necessarily have to be based entirely on economics, but the inclusion of this data is important in terms of information relative to precluding future opportunities and giving decision makers all the facts necessary to make informed decisions.

At the same time, however, we are disappointed in the inclusion of Raymond Mountain, Buffalo Hump, Sand Dunes, Honeycomb Buttes, and Oregon Buttes as WSA's considering that potential energy resources on 105,342 acres will never be realized. While reserve estimates for most of the areas are provided, the environmental consequences analysis does not include economic estimates for the loss to the federal treasury, local governments and the general economy when mineral activities in these areas are eliminated. To perform this analysis, it is recommended DOE price forecasts be utilized so that quantitative economic figures are documented on potentially lost oil and gas reserves. The justification for wilderness does not necessarily have to be based entirely on economics, but the inclusion of this data is important in terms of information relative to precluding future opportunities and giving decision makers all the facts necessary to make informed decisions.

446

Anoco Production Company
Denver Region
935 Broadway
P.O. Box 830
Denver, Colorado 80202
303430-4046

Response to Letter 446

Estimates for the economic value of the oil and gas reserves foregone have been added to the Final EIS. These figures are based on a single value figure for the oil or gas resource. Cost projections for future years would have limited value because of the uncertainty surrounding estimated reserves and future price changes. If none of the WSAs are designated wilderness and all are open to oil and gas leasing, it is unlikely that the estimate of recoverable reserves would be realized in all the WSAs. The oil and gas reserves actually recovered would most likely be lower.

Previous drilling history in most of the WSAs supports the view that future drilling activity would not be extensive. The likelihood that beneficial economic impacts would occur, under nonwilderness, in any particular WSA within the next 10 to 15 years would be moderate, at best. The Sand Dunes and Lake Mountain WSAs, where there is already production are exceptions.

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Mr. Al Stein
February 9, 1989
Page 2

Two aspects demonstrate the need for careful consideration before adding more wilderness. First, it is important that energy resources has and continues to be an important component of Wyoming's economy. In addition, continued reliance on foreign sources of energy makes it imperative that potentially valuable lands for oil and gas be evaluated to the fullest extent possible. There are reported examples of oil and gas activities being compatible with other sensitive surface values. Combining the compatibility consideration with the need to develop domestic oil and gas resources, we respectfully request that the proposed action of recommending 105,347 acres of wilderness be reconsidered and replaced with a recommendation of no new wilderness.

Thank you for considering our comments.

Neil W. Allen
Manager
Environmental, Safety & Regulatory Affairs
DNB/ae

Wyoming Wildlife Federation
PO Box 106
Cheyenne, WY 82002

February 2, 1989

Alan Stein
Rock Springs District
Bureau of Land Management
PO Box 1849
Rock Springs, WY 82902-1865

Dear Mr. Stein:

The Wyoming Wildlife Federation, the state's largest citizens' organization representing and supporting, would like to thank you for this opportunity to comment on the Revised Draft of the Rock Springs District Wilderness Environmental Impact Statement. We are very pleased to support the BLM's recommendation that all of parts of five WSAs in the district be included into the national wilderness system. Each of these five areas offers an outstanding opportunity for solitude. The areas have retained the naturalness and appear to be nearly unaffected by human activity. These areas also include important supplemental values such as crucial big game winter ranges, habitat for rare, threatened or endangered species, important natural or historic landmarks, diverse topography and geology, ancient fossils of many types, archaeological sites, spectacular scenery and the opportunity for many forms of recreation.

We believe that in addition to the five WSAs recommended by the BLM for inclusion in the Rock Springs District are several other areas in the Rock Springs District are particularly deserving of full wilderness status. A number of our members have highly recommended that the 13,865-acre Lake Mountain WSA be recommended for wilderness designation. Because of this area's steep, folded topography and forested areas, an outstanding opportunity for solitude exists. Also, as stated in the Draft EIS: "The landscape appears entirely natural and unaffected by human activity." This area also contains one of only two streams in the upper Green River Drainage to harbor a pure strain of Colorado River cutthroat (*Oncorhynchus clarkii pleuriticus*). The WSA contains crucial winter range for deer and one of the

Responses to Letter 447

1. Lake Mountain WSA - Within the Lake Mountain WSA, 4,200 acres are in the 5,264-acre Rock Creek ACEC. This WSA is, as you point out, steeply folded and provides opportunities for solitude. It contains 600 acres of pre-FLPMA leases and there is a producing oil and gas field which drains part of the WSA. The eastern part of the area is high potential for oil and gas. While the steep topography may prohibit the location of oil and gas facilities in the Rock Creek drainage, activities outside the drainage may adversely affect wilderness values. BLM believes the ACEC's wilderness values would be mostly preserved under either All Wilderness or No Wilderness.

The area contains crucial habitat for a naturally wintering herd of elk and that the Rock Creek drainage contains a pure strain of the sensitive Colorado River cutthroat trout. Nonwilderness management would not result in adverse impacts to either of these resources.

Wells in or near the Lake Mountain WSA would likely be associated with the Exxon LaBarge Project in the Riley Ridge Field and would most likely use the same pipeline and other facilities. BLM believes the area of highest potential for oil and gas lies in the eastern part of the WSA. Development would most likely take place there. Because of the rugged topography, restrictions in the ACEC and on the wildlife winter range, and the large area drained by gas wells in the area, relatively few wells would be drilled even if the WSA is not designated. As you point out, the rugged topography would help to screen and otherwise make wells less noticeable.

entirely elk herds in western Wyoming.

Only 600 acres of pre-FLPMA oil and gas leases remain in the WSA. This would likely result in one well being drilled with approximately 10.5 acres of disturbance. Because of the steep, folded, mountainous topography this intrusion would probably go largely unnoticed. Also, it is highly unlikely that the lease holder would develop this single well unless the entire WSA was opened up for future leasing, which it would not be under the wilderness designation.

Since, as it is stated in the Draft EIS: "Typically, wells drilled into the Madison formation in the vicinity of the WSA drain upwards of 1,400 acres", it appears that well development outside of the WSA should enable near total recovery of the gas resource area without destroying the wilderness characteristics of this area. As noted in the Draft EIS: "Some drainage of the gas resources under the WSA is [already] occurring from wells that were drilled outside the WSA." Values such as steep slopes, seasonal stream (Rock Creek), critical big game winter range, and highly erodible soils conflict with oil and gas exploration and development and harvesting activities. These attributes of the WSA as well as naturalness and the opportunity for solitude would be largely destroyed if the area is not designated wilderness. The Wyoming Wildlife Federation (WWF) strongly supports designation of this WSA to wilderness status.

The White-Horse Creek WSA is another area that the WWF strongly supports being designated wilderness. This WSA is contiguous with the Oregon Buttes WSA. These two WSAs, along with the contiguous Honeycomb Buttes WSA, would together form an outstanding addition to the wilderness system. The combined areas would offer an outstanding opportunity for solitude and the naturalness of the White-Horse Creek WSA is very near pristine conditions. The White-Horse Creek WSA probably offers more habitat and topographic diversity than any other WSA in the Rock Springs District. The area contains riparian and pine forests, sage and grasswood communities, wet and dry meadows, high, sheer sandstone cliffs and badland topography. A sense of isolation and solitude can quickly be felt because of the diversity of landscapes. The area contains a variety of fossils and archaeological sites and an outstanding calving area for the unique Sands Elk Herd. The area contains no pre-FLPMA oil and gas leases. It also contains potential habitat for raptors, including peregrine falcons, which have been seen in the area. Your argument that "activities on adjacent lands could easily intrude into the WSA" is poor. This argument could be made for each and every WSA in the district. All WSA's include some non-wilderness lands, but this should not be used as an argument to find a WSA non-eligible for wilderness designation. The diverse topography in the White-Horse Creek WSA would provide visual screening from activities outside of the WSA.

1. Whitehorse Creek WSA - The analysis for the Whitehorse Creek WSA was modified. There are more range improvements in the WSA than the Revised Draft EIS indicated. If these range improvements are not maintained, livestock distribution may change and current range condition may be adversely affected. The special features you mention would be preserved even under nonwilderness. The site-specific analysis reflects these findings.
2. Red Creek Badlands WSA - The Red Creek WSA is part of a much larger ACEC which is guided by an ACEC management plan designed to protect this important watershed. Off-highway vehicle (OHV) use is restricted to existing roads and trails in this area under the No Wilderness alternative.
3. Resource Management Plans (RMPs) provide guidance for managing an area and for resolving conflicts between competing uses. Seasonal restrictions and other restrictions designed to minimize environmental impacts to other resources are intended to highlight areas where

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The Red Creek badland WSA is another area particularly deserving of wilderness status. This area has no known recoverable reserves of oil and gas. It is characterized by juniper forests, badlands, cliffs, buttes, outcrops, wet and dry meadows and contains what is most probably Wyoming's only naturally-occurring stands of pinon pine. The WSA is an important big game and other wildlife habitat. It is a very fragile watershed with highly erodible soils that cannot withstand surface disturbance such as off-road vehicle use and oil and gas development. The area provides what is probably the greatest opportunity for solitude of any of the Rock Springs District's WSAs. The area's naturalness is also well preserved. The very few disturbances in the area have been transformed into natural appearing formations due to the highly erodible nature of the soils. There appears to be no valid reason for not including this area into the wilderness system.

The WNF would like to address a few other issues that we believe are of notable consequence to the wilderness issue. Oil and gas development is a prominent part of Wyoming's economy which should be given careful consideration during the wilderness decision-making process. Wyoming is also noted for her grand scenery, diverse and abundant wildlife populations and her wilderness. These values do not have to be incompatible with oil and gas development. As stated in the Draft EIS, oil and gas can be pulled out of crucial wildlife habitats and WSAs by wells located outside of the critical habitats or WSAs. This principle should be utilized wherever possible in the decision-making process to spare crucial habitats and WSAs from development.

The Draft EIS is full of promises of seasonal use, no surface occupancy and other stipulations that would be imposed on oil and gas lease holders to help insure the integrity of crucial habitats and wilderness characteristics. How only has to look at the BLM's record to discover that lease stipulations are virtually meaningless. Just today, in the Casper Star-Tribune, the lead article in Section 3 dealt with the BLM's reneging on promises to impose seasonal use restrictions on the crucial deer winter range in the Battlement area of central Wyoming. I quote: "BLM has allowed winter drilling for oil and gas in the crucial game winter range for the past two winters despite provisions in its own resource management plan (RMP) which stipulated lease stipulations prohibiting drilling between Nov. 15 and April 1." In summary, we would feel much better about a WSA's being designated wilderness and then developed from outside the area rather than relying on the BLM to enforce stipulations written into lease agreements or RMPs.

Another concern of the WNF is livestock grazing. For those WSAs where range condition is mentioned, part or all of the area is in the I (Improv) category. This, according to BLM personnel, indicates that the range is in a deteriorated condition and is in need of improvement. Yet, in

these conflicts may occur. For example, a crucial big game winter range would require a seasonal restriction on oil and gas leases so that the right to conduct certain operations is not granted to the lessee in the lease.

When an oil and gas lessee makes a specific proposal, BLM reviews the proposal to determine if it should be approved, modified, or denied. Part of that review is a review to determine if the individual proposal would result in a conflict between the oil and gas activity and the wildlife concerns. For a proposal for oil and gas activity to be approved, BLM must also approve an exception to the seasonal lease stipulation. This can either be approved or denied. If the exception is denied, the proposal is not approved. Normally, a lease stipulation, such as a seasonal stipulation, would not be enforced if there is no conflict with the resource which it was designed to protect (e.g., a seasonal stipulation for wildlife).


- The discussion on range management in the Final EIS has been modified. See discussion under Comment 457-1 to James Magagna (Rock Springs hearing). It is important to clarify the point that grazing management would not change as a result of wilderness or nonwilderness management. However, resource conditions under either wilderness or nonwilderness may point to a need to change management for grazing.
- The discussion in the Final EIS for each WSA not recommended for wilderness designation has been modified to make the rationale for a non-suitable recommendation more apparent.

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all WSAs the Draft EIS reports that grazing management will not change. Our members and Owe & Fish and BLM biologists indicate that wet meadows, sedge grows, stream banks and other riparian habitats in all WSAs are generally in poor condition due to livestock grazing. The Draft EIS reports that riparian habitats which have been fenced to exclude livestock have shown improvement since being fenced. This would indicate that changes in grazing management should be made. The WNF suggests that grazing management policies for important riparian wildlife habitats and WSAs be revisited and changed where improvements in range could be made.

The WNF would like to point out that the BLM states no arguments or reasons for rejecting those WSAs not recommended for wilderness designation. The typical discussion in the Draft EIS states that the WSA has an outstanding opportunity for solitude, the naturalness of the area is intact, the area contains important wildlife, scenic and historical values, has little or no probability for oil and gas or mineral development and so on few pre-WMA leases. Even so, the BLM recommends the area not be included in the wilderness system. The implication is that nothing in the foreseeable future will occur to injure the wilderness characteristics of the WSA, so no need for a WMA lease. The WNF recommends that instead of leaving these things to chance, that all WSAs be recommended for wilderness status.

Again, we thank you for the opportunity to comment on this important issue.

Sincerely,

 Tom Dyer
 President
 Wyoming Wildlife Federation

Defenders OF WILDLIFE

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January 4, 1989

Testimony of Dick Randall for Defenders of Wildlife, regarding the Wildernee Environmental Impact Statement, Rock Springs District, BLM. Defenders address is 1244 19th St. N.W., Washington, D.C. 20036 (local address, box 507, Rock Springs, Wyo. 82901)

I intend to furnish written comments later. Tonight I want to make a few brief observations.

The Rock Springs BLM District contains nearly 4 million acres of public land. BLM has proposed that less than two percent of this acre be designated as wildernee. Compared to the whole, the five acres recommended for wildernee are insignificant in size, about the same as five drops of water in a large bucket.

It is interesting that the BLM, during several years of study, were able to map less than two percent of this huge area that had not been coded, staked, drilled, or otherwise rendered unfit for wildernee designation.

While disappointed that BLM found that eight of the study areas were unsuitable for wildernee, we commend the Bureau for coding Buffalo Hump and a portion of the Oregon Buttes to the proposed wildernee areas.

Livestock grazing would not be affected if the five acres are designated as wildernee. Further, all of the proposed wildernee areas have no, or low potential for oil and gas development, and no significant locatable minerals are found in these areas.

And yet, according to the media, the Rocky Mountain Petroleum Association of Wyoming believes, in effect, that the end of the world will come much sooner if they are not allowed to bulldoze, mow, clear, and drill each of the tiny proposed wildernee areas. Evidentially, the Association believes that those who own the public lands are not entitled to even a few small places where the head of man is not predominant. It is seldom you find such arrogance in any American industry.

It is unfortunate that BLM stated that "only public comments received on the latest draft will be considered in formulating a final wildernee recommendation". Three people who are articulate spokesmen for wildernee contacted me and said "go hell with it! Now we staked the dead. All of our efforts expended to protect a few small pieces, the time we spent in the field documenting reasons why these places are special, our testimony, it's all been thrown in the trash bin. And now, we are supposed to start from scratch. How can you participate when they change horses in the middle of the stream?"

1244 NINETEENTH STREET, NW • WASHINGTON, DC 20036 • (202) 686-9510

Response to Letter 459

The BLM does not imply that earlier comments are not acceptable. The third paragraph under Consultation and Coordination explains the intent. The BLM wanted those who made earlier comments to judge whether they still applied. Many changes were made between the 1983 Draft EIS and the 1988 Revised Draft EIS. At the public hearings and through the media, the BLM told the public during the comment period that if they wanted earlier comments to be considered, they should let BLM know.

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Al Stein, Team Leader, Rock Springs BLM, has assured me that this is not the case. Comments that are appropriate to the final Environmental Impact Statement will be considered, providing the authors write BLM and tell them they haven't changed their mind.

Of course, this is not what BLM said. Most people would infer, from this ruling, unless you write, or testify, before February 19, 1989, all of your previous participation in the wildernee issues, no matter how much blood, sweat, and tears, will be dumped, unless you start from the beginning and do it all again.

If, as Al Stein assures me, that this is not the case, then I suggest that BLM subject their employees to a course in plain old English that teaches, "say what you mean".

Thank you for allowing me the the privilege to speak on behalf of a few places that haven't been conquered yet.

Dick Randall
for Defenders of Wildlife



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PETROLEUM ASSOCIATION OF WYOMING
 a division of Rocky Mountain Oil and Gas Association

951 Werner Court, Suite 100
 Casper, Wyoming 82401
 (307) 294-5332

Richard F. Kestelake
 Executive Director
 Wendy H. Parnell
 Associate Director

January 5, 1989

Mr. Al Stein
 Rock Springs District
 Bureau of Land Management
 P.O. Box 1869
 Rock Springs, Wyoming 82902-1869

Re: Revised Draft: Rock Springs District
 Wilderness Environmental Impact Statement

Dear Mr. Stein:

On behalf of the Petroleum Association of Wyoming, a division of the Rocky Mountain Oil and Gas Association whose members account for more than 90% of the oil and gas activities in Wyoming, please accept the following comments on the Revised Draft Rock Springs District Wilderness Environmental Impact Statement.

PAM supports the nonwilderness recommendations for the Lake Mountain, Allakli Draw, South Pinnacles, Allakli Basin-Sand Dome, Red Lake and Whitehorse Creek Wilderness Study Areas. These areas contain significant reserves of oil and gas. We oppose the BLM wilderness recommendations for Beyond Mountain, Buffalo Hump, Sand Lanes, Horseshoe Buttes and Crown Butte Wilderness Study Areas. These lands have significant potential for energy resources.

We are extremely concerned over the Rock Springs District recommendation to add five new wilderness areas totalling more than 100,000 acres to Wyoming's wilderness system. There are already over 3.1 million acres of designated wilderness in Wyoming. The current wilderness lands provide a vast range of opportunities for outdoor enthusiasts who choose to enjoy these primitive areas. PAM simply cannot support the addition of any new acres to a land use designation that withdraws land from potential mineral productive status.

The designation of wilderness precludes all future oil and gas exploration and development opportunities, as well as other multiple uses. The five areas recommended for wilderness contain total recoverable reserves estimated to be in excess of 267 billion cubic feet of natural gas. These gas reserves will be inaccessible if the lands are designated wilderness. These energy reserves, which would be foregone under wilderness designation, have the potential to generate over \$17 million in taxes and royalties to state and local governments.

We disagree with the assumption discussed on page 11 that because lands surrounding the WMA's which are recommended for wilderness would be available for leasing that there would be "... increased income to the State and counties" from jobs or oil and gas revenues to the State and counties. The IED goes on

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951 Werner Court, Suite 100
 Casper, Wyoming 82401

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Mr. Al Stein
 January 5, 1989

to state that social and economic resources were not analyzed because it was felt that oil and gas drilling would take place in the vicinity of the WMA if it could not take place within the WMA. This assumption is in error because it fails to recognize that oil and gas reserves which underlie the WMA's will be foregone forever. These reserves will not be accessible in any manner, not even by directional drilling. Therefore, there will be a significant loss of tax and royalty revenues. In addition, it is reasonable to assume that there would be a significant number of wells which will not be drilled, thereby forgoing job opportunities as well.

1

It is critically important to both Wyoming and our nation that opportunities to explore for and develop new sources of oil and gas be provided, not eliminated. From a national perspective, the United States is continuing to import an increasing percentage of our energy requirements. At the end of 1988, we were importing 41% of our petroleum needs. It is unwise energy policy for the Federal government to continue to whittle down the available land base which has the potential for discovery of domestic sources of energy and minerals.

2

Neither the state of Wyoming nor its citizens can afford to allow the Federal government to continually take more land out of revenue generating tax status. As a major energy producing state, it is quite evident that the status of the Wyoming economy is closely tied to the general health of the oil and gas industry. Every action which precludes access to minerals for exploration and development purposes will have a negative impact on the state and local economies. Local governments in the BLM Rock Springs District are heavily reliant on minerals, including coal, trona as well as oil and gas for their tax base. 80% of Hanna County's assessed valuation is derived from oil and gas, 30% of Sweetwater's, 47% of Lincoln's and 80% of Sublette's. Further erosion of potential tax base is a trend the state and local governments and education must resist.

3

Industry cannot dictate where oil and gas resources occur. Therefore, prospective locations may well be environmentally sensitive. Industry has demonstrated repeatedly that with current technology it is possible to explore for and develop oil and gas resources without causing undue harm to sensitive surface values. In view of the demonstrated compatibility of oil and gas resources with other resource values and uses, we believe it is unnecessary to close areas with high potential for energy resources from future development. The sensitive surface values of these areas can be protected by application of special stipulations without complete withdrawal.

Thank you for the opportunity to comment.

Sincerely,

 Wendy H. Parnell
 Associate Director

cc: Doug Dow
 Bill Britter
 Elmer Person
 Alice Freil Reutter

Responses to Letter 469

1. BLM believes this assumption is valid. The analysis in the EIS estimates the number of wells that could be drilled in each WSA if it were not designated wilderness.

The likelihood of finding producing fields in each WSA where production is estimated is rather small. Equally small, or smaller, is the likelihood that a producing field would be located wholly within a WSA. Cumulatively, the reasonably foreseeable level exploration and development would be lower than that shown for all the WSAs combined. Even this level would be a small portion of the regional activity. Therefore, while there may be fewer wells drilled, the overall social and economic effect would be minimal.

2. There is no evidence to indicate that either the current level of oil and gas activity or the percent of imported petroleum is due to a reduced acreage of land under lease. It appears that the primary reason for these 2 occurrences is that current oil prices are, and have been, relatively low.

3. Wilderness continues to be an issue of national concern. While wilderness designation restricts some resource uses, some of the same resource uses adversely affect wilderness values. This EIS is part of the planning and decisionmaking process to determine where wilderness values should be preserved, sometimes at the expense of other resource uses. Federal agencies are charged with recommending to Congress which lands are suitable for wilderness designation. Congress makes the final decision, taking into account concerns such as those you express.

SELECTED COMMENTS WITH RESPONSES FROM WILDERNESS HEARINGS

COMMENT

JAMES MAGAGNA (457)

"There's no section dealing with the impact on livestock grazing."

I find at least 3 inconsistent policy statements regarding the use of motorized vehicles. At one point it says they will be prohibited; at another point it says ranchers will be allowed to use them with prior approval from the Bureau. In several other instances, including incidentally an analysis of "No Wilderness" designation, it says that the use of motorized vehicles with relationship to grazing will be limited to no more than 1 or 2 days per year or perhaps every other year for the purposes of grazing analysis. And I guess that last one could be interpreted as saying that the Bureau personnel who do an annual or perhaps biennial analysis for grazing practices of the livestock industry will use motorized vehicles, while those of us who are charged with maintaining a grazing practice out there in a type and a manner of intense grazing that is conducive to the protection and enhancement of the resource will be denied the use of motorized vehicles for our own purposes.

Another issue - reservoirs. There are some 9 reservoirs in the Honeycomb Buttes wilderness area. Some are currently holding water, some have silted in or have been washed out. In the past, working with the Bureau and with their permission, we have continually repaired various reservoirs on sort of an ongoing program. Perhaps the total were never all in operational condition at one time but different ones were repaired at different times.

They have made a determination that there will be no reconstruction except one of the existing reservoirs that is currently in a state of disrepair. And to quote from the document "only 1 reservoir has been determined as necessary for reconstruction." I question who has made this determination. This is a range improvement that benefits wildlife, that benefits livestock grazing. ... I, as the primary grazing permittee in the area, did not have any input and I would ask whether the Wildlife Federation or other groups interested in wildlife habitat have had input into that particular determination.

RESPONSE

BLM

The Final EIS was modified to improve the discussion on the impacts to livestock grazing for each WSA.

The Revised Draft EIS states that ranchers would be allowed to use motorized vehicles in connection with grazing operations on a case-by-case basis. This fits with the "minimum tool" concept for wilderness areas, where the least disruptive method would be used. The number of trips per year in the Revised Draft EIS were estimates of the amount of vehicle use that could be expected. They were not intended to be limitations. They indicate that the use of vehicles in connection with grazing is relatively low. The intent is to allow grazing to continue if a WSA is designated.

To analyze environmental impacts, it was necessary to make some assumptions about grazing management. The statement that there would be no reconstruction except for 1 reservoir was one of those assumptions. It is not a decision. Future decisions relative to grazing management and range improvements will be made separately from this EIS and will involve the permittee, wildlife organizations, and the public. The comment process on the EIS provides an opportunity for the public to be involved in the decisionmaking process.

COMMENT

JAMES MAGAGNA (continued)

The overall issue of grazing management and grazing management practices are addressed in the Revised Draft with the simple statement that grazing management would not change. And again, I ask who has made the determination that grazing management will not change? If the needs of the resource, the forage, dictate that there be changes in grazing management practices down the road, if the needs of livestock, of wildlife dictate that there be changes in grazing management practices down the road, here we would be faced with a predetermination in a wilderness environmental impact statement that they will not change and I submit that there hasn't been an analysis done of either the need for change or the feasibility of change.

A statement is made that there would probably be no change in the number of coyotes in the area. I'm not sure that I understand fully what the implications of a BLM wilderness designation are for predator control. But, if they're similar, as I assume they are, to those of Forest Service wilderness designations, it means there will be no aerial coyote control. It means there will be no use most likely of traps and snares in the area because access won't be available. I seriously question whether the net result is going to be probably no change in the number of coyotes in a given area.

There is an assumption made in the overall analysis that any private and state lands in this area and any other proposed wilderness area would be exchanged for other lands. And it says this is done for the purpose of analysis. But I submit that it's very dangerous, and very improper even for the purpose of analysis for a Federal agency to take it upon themselves to assume that such a change would take place or even suggest that they take place. I believe that this is an infringement upon the rights of the State of Wyoming with regard to State lands and upon the rights of the private landowner with regard to private land.

I think that the analysis and the decisions that have been predetermined in this document have been done totally without the cooperation, consultation, and coordination with the livestock permittees and other affected parties, and particularly in so far as that coordination is dictated by Section 8 of the Public Rangeland Improvement Act insofar as these analyses do impact range improvements and allotment management plans in the area.

RESPONSE

BLM (continued)

The statement that grazing management would not change is not a decision. At this time, there appears to be no need to change grazing management. The Final EIS more clearly describes grazing management under designation and nondesignation for all WSAs. The statement meant there would be no change in grazing management, other than the changes described in the EIS, as a result of wilderness designation. If resource management concerns in an area change, changes in grazing management would be considered under both designation and nondesignation.

The methods available for controlling predators would be more limited under wilderness designation but predator control could still be accomplished.

The discussion dealing with inholdings was modified in the Final EIS. The State of Wyoming indicated a willingness to consider exchanges of State lands in areas designated as wilderness. The site-specific analyses state that certain State and private lands would be added to a wilderness area, in the event they are acquired. No assumption is made that they would be acquired. The rights of landowners would not be affected by wilderness designation. BLM does not intend to imply that any private lands would be condemned for wilderness.

The Revised Draft EIS reflects a modified analysis which includes additional information on with grazing management. Three public hearings were held. The Final EIS was changed to respond to your comments and those of others interested in grazing management. There is a misunderstanding between what constitutes a decision affected grazing management and an assumption about grazing management used to complete the environmental impact analysis. It is hoped that the explanations and changes to the Final EIS clarify the difference.

COMMENT

GERALD STOUT (458)

We've got claims and we've paid on them and we've spent money over there. We expect that if it goes into wilderness, there's no chance whatsoever to do anything with mining exploration and going ahead with the mine.

DICK RANDALL (459) (Defenders of Wildlife)

When we mention predator control. I spent 5 years at the Fish and Wildlife Service in this area. We no longer use toxicants, poisons. Therefore, most of the control in this area is aerial. I've chased many coyotes in the Honeycomb Buttes area. They have thousands and thousands of hiding places. You don't kill many. So predator control is moot as far as I'm concerned.

KIM BROWN (463)

I don't think these areas are suited for wilderness designation. I think it'll be just like a park, they'll make it wilderness, then they'll want a 10-mile bump around it, and a 10-mile bump around that. And pretty soon it'll be a big area.

RESPONSE

BLM

When an area is designated wilderness, valid existing rights are preserved, including those for locatable minerals. If a mining claim holder develops a claim, activity may be allowed to take place as a non-conforming use. This means it is not consistent with wilderness management. There are areas around the country where such uses occur. Generally, they adversely impact wilderness values in only a portion of the wilderness area.

BLM

See Response to James Magagna's hearing comment.

BLM

There is no intent to have buffer areas around any of the WSAs designated wilderness. The lands surrounding wilderness areas have been inventoried. BLM determined that they were not suitable for wilderness designation.

APPENDIX A

WYOMING BUREAU OF LAND MANAGEMENT (BLM) STANDARD MITIGATION GUIDELINES FOR SURFACE-DISTURBING ACTIVITIES

INTRODUCTION

The "Wyoming BLM Standard Oil and Gas Lease Stipulations" were developed in 1986. During their implementation, it was recognized that various land uses, other than those related to oil and gas exploration and development, should be subject to similar kinds of environmental protection requirements. Using the Wyoming BLM standard oil and gas lease stipulations as a basis, development of the "Wyoming BLM Standard Mitigation Measures for Surface-Disturbing Activities" began.

The term "guidelines" better describes the intent and use of these mitigation standards than the terms "stipulations" or "measures." These guidelines are primarily for the purpose of attaining statewide consistency in how requirements are determined for avoiding and mitigating environmental impacts and resource and land use conflicts. Consistency in this sense does not mean that identical requirements would be applied for all similar types of land use activities that may cause similar types of impacts. Nor does it mean that the requirements or guidelines for a single land use activity would be identical in all areas.

There are two ways the standard mitigation guidelines are used in the resource management plan/environmental impact statement (RMP/EIS) process: (1) as part of the planning criteria in developing the RMP alternatives, and (2) in the analytical processes of both developing the alternatives and analyzing the impacts of the alternatives. In the first case, an assumption is made that any one or more of the standard mitigations will be appropriately included as conditions of relevant actions being proposed or considered in each alternative. In the second case, the standard mitigations are used (1) to develop a baseline for measuring and comparing impacts among the alternatives; (2) to identify other actions and alternatives that should be considered, and (3) to help determine whether more stringent or less stringent mitigations should be considered.

Some of the seasonal restrictions in the standard oil and gas lease stipulations contain the statement, "This limitation does not apply to maintenance and operation of producing wells." This statement was included because the stipulations were developed specifically for application to oil and gas leases at

the time of issuance, not for activities associated with producing wells. At lease issuance, the only action that can be generally contemplated is the possibility that exploratory drilling may occur somewhere on the lease area. Unfortunately, the provision has been interpreted by some people to mean that the seasonal restriction disappears at the operational state (that is, if a producing well is attained). It must be understood that at both the oil and gas exploration stage and the operation or development stages, additional site-specific environmental analyses are conducted and any needed restrictions or mitigations identified become part of the operation or development plan. For example, wells may continue to produce, but related activity may be limited. Thus, it is possible for such seasonal restrictions to continue in effect and be applicable to maintenance and operation of producing wells, if supported by the environmental analyses.

The RMP/EIS does not decide or dictate the exact wording or inclusion of these guidelines. Rather, the standard guidelines are used in the RMP/EIS process as a tool to help develop the RMP alternatives and to provide a baseline for comparative impact analysis in arriving at RMP decisions. These guidelines will be used in the same manner in analyzing activity plans and other site-specific proposals. These guidelines and their wording are matters of policy. As such, specific wording is subject to change primarily through administrative review, not through the RMP/EIS process. Any further changes that may be made in the continuing refinement of these guidelines and any development of program-specific standard stipulations will be handled in another forum, including appropriate public involvement and input.

PURPOSE

The purpose of the "Standard Mitigation Guidelines" are (1) to reserve, for the BLM, the right to modify the operations of all surface and other human presence disturbance activities as part of the statutory requirements for environmental protection, and (2) to inform a potential lessee, permittee, or operator of the requirements that must be met when using BLM-administered public lands. These guide-

APPENDIX A

lines have been written in a format that will allow for (1) their direct use as stipulations, and (2) the addition of specific or specialized mitigation following the submission of a detailed plan of development, other project proposal, and an environmental analysis.

Those resource activities or programs currently without a standardized set of permit or operation stipulations can use the mitigation guidelines as stipulations, as conditions of approval, or as a baseline for developing specific stipulations for a given activity or program.

Because use of the mitigation guidelines was integrated into the RMP/EIS process and will be integrated into the site-specific environmental analysis process, the application of stipulations or mitigation requirements derived through the guidelines will provide more consistency with planning decisions and plan implementation than has occurred in the past. Application of the standard mitigation guidelines to all surface and other human presence disturbance activities concerning BLM-administered public lands and resources will provide more uniformity in mitigation than has occurred in the past.

1. Surface Disturbance Mitigation Guideline

Surface disturbance will be prohibited in any of the following areas or conditions. Exception, waiver, or modification of this limitation may be approved in writing, including documented supporting analysis, by the Authorized Officer.

- a. Slopes in excess of 25 percent.
- b. Within important scenic areas (Class I and II Visual Resource Management Areas).
- c. Within 500 feet of surface water and/or riparian areas.
- d. Within either one-quarter mile or visual horizon (whichever is closer) of historic trails.
- e. Construction with frozen material or during periods when the soil material is saturated, frozen, or when watershed damage is likely to occur.

Guidance

The intent of the SURFACE DISTURBANCE MITIGATION GUIDELINE is to inform interested parties (potential lessees, permittees, or operators) that when one or more of the five (1a through 1e) conditions exist, surface-disturbing activities will be prohibited unless or until the lessee or his designated representative and the surface management

agency (SMA) arrive at an acceptable plan for mitigation of anticipated impacts. This negotiation will occur prior to development.

Specific criteria (for example, 500 feet from water) have been established based upon the best information available. However, such items as geographical areas and seasons must be delineated at the field level.

Exception, waiver, or modification of requirements developed from this guideline must be based upon environmental analysis of proposals (for example, activity plans, plans of development, plans of operation, applications for Permit to Drill) and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

2. Wildlife Mitigation Guideline

- a. To protect important big game winter habitat, activities or surface use will not be allowed from November 15 to April 30 within certain areas encompassed by the authorization. The same criteria applied to defined big game birthing areas from May 1 to June 30.

Application of this limitation to operation and maintenance of a developed project must be based on environmental analysis of the operational or production aspects.

Exception, waiver, or modification of this limitation in any year may be approved in writing, including documented supporting analysis, by the Authorized Officer.

- b. To protect important raptor and/or sage and sharp-tailed grouse nesting habitat, activities or surface use will not be allowed from February 1 to July 31 within certain areas encompassed by the authorization. The same criteria applied to defined raptor and game bird winter concentration areas from November 15 to April 30.

Application of this limitation to operation and maintenance of a developed project must be based on environmental analysis of the operational or production aspects.

Exception, waiver, or modification of this limitation in any year may be approved in writing, including documented supporting analysis, by the Authorized Officer.

- c. No activities or surface use will be allowed on that portion of the authorization area identified within (*legal description*) for the purpose of protecting (such as sage/sharp-tailed grouse breeding grounds, and/or other species/activities) habitat.

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Exception, waiver, or modification of this limitation in any year may be approved in writing, including documented supporting analysis, by the Authorized Officer.

- d. Portions of the authorized use area legally described as (*legal description*), are known or suspected to be essential habitat for (*name*) which is a threatened or endangered species. Prior to conducting any onsite activities, the lessee/permittee will be required to conduct inventories or studies in accordance with BLM and U.S. Fish and Wildlife Service guidelines to verify the presence or absence of this species. In the event that (*name*) occurrence is identified, the lessee/permittee will be required to modify operational plans to include the protection requirements of this species and its habitat (for example, seasonal use restrictions, occupancy limitations, facility design modifications).

Guidance

The WILDLIFE MITIGATION GUIDELINE is intended to provide two basic types of protection, seasonal restrictions (2a and 2b) and prohibition of activities or surface use (2c). Item 2d is specific to situations involving threatened or endangered species. Legal descriptions will ultimately be required and should be measurable and legally definable. There are no minimum subdivision requirements at this time. The area delineated can and should be defined as necessary, based upon current biological data, prior to the time of processing an application and issuing the use authorization. The legal description must eventually become a part of the condition for approval for the permit, plan of development, and/or other use authorization.

The seasonal restriction section identified three example groups of species and delineated three similar time frame restrictions. The big game species including elk, moose, deer, antelope, and bighorn sheep, all require protection of crucial winter range between November 15 and April 30. Elk and bighorn sheep also require protection from disturbance from May 1 to June 30, when they typically occupy distinct calving and lambing areas. Raptors include eagles; accipiters, falcons (peregrine, prairie, and merlin); buteos (ferruginous and Swainson's hawks); osprey, and burrowing owls. The raptors and sage and sharp-tailed grouse require protection from disturbance from November 15 through April 30 while they occupy winter concentration areas.

Item 2c, the prohibition of activity or surface use, is intended for protection of unique wildlife habitat areas or values within the use area. These areas or values must be factors that limit life-cycle activities (for example, sage grouse strutting grounds, known

threatened and endangered species habitat) that cannot be protected using seasonal restrictions.

Exception, waiver, or modification of requirements developed from this guideline must be based upon environmental analysis of proposals (such as activity plans, plan of development, plans of operation, Applications for Permit to Drill) and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

3. Cultural Resource Mitigation Guideline

When a proposed discretionary land use has potential for affecting the characteristics which qualify a cultural property for the National Register of Historic Places (National Register), mitigation will be considered in accordance with section 106 of the Historic Preservation Act, procedures specified in 36 CFR 800 will be used in consultation with the Wyoming State Historic Preservation Officer and the Advisory Council of Historic Preservation in arriving at determinations regarding the need and type of mitigation to be required.

Guidance

The preferred strategy for treating potential adverse effects on cultural properties is "avoidance." If avoidance involves project relocation, the new project area may also require cultural resource inventory. If avoidance is imprudent or unfeasible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protection barriers and signs, or other physical and administrative measures.

Reports documenting results of cultural resource inventory, evaluation, and the establishment of mitigation alternatives (if necessary) shall be written according to standards contained in BLM Manuals, the cultural resource permit stipulations, and in other policy issues by the BLM. These reports must provide sufficient information for section 106 consultation. Reports shall be reviewed for adequacy by the appropriate BLM cultural resource specialist. If cultural properties on, or eligible for, the National Register are located within these areas of potential impact and cannot be avoided, the Authorized Officer shall begin the section 106 consultation process in accordance with the procedures contained in 36 CFR 800.

Mitigation measures shall be implemented according to the mitigation plan approved by the BLM Authorized Officer. Such plans are usually prepared by the land use applicant according to BLM specifications. Mitigation plans will be reviewed as part of section 106 consultation for National Register eligible or listed properties. The extent and nature of recommended mitigation shall be commensurate

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with the significance of the cultural resource involved and the anticipated extent of damage. Reasonable costs for mitigation will be borne by the land use applicant. Mitigation must be cost effective and realistic. It must consider project requirements and limitations, input from concerned parties, and be BLM approved or BLM formulated.

Mitigation of paleontological and natural history sites will be treated on a case-by-case basis. Factors such as site significance, economics, safety, and project urgency must be taken into account when making a decision to mitigate. Authority to protect (through mitigation) such values is provided for in the Federal Land Policy and Management Act of 1976 (FLPMA), section 102(a)(8). When avoidance is not possible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protection barriers and signs, and other physical and administrative protection measures.

4. Special Resource Mitigation Guideline

To protect (*resource value*), activities or surface use will not be allowed (that is, *within a specific distance of the resource value or between date-to-date*) in (*legal description*).

Application of this limitation to operation and maintenance of a developed project must be based on environmental analysis of the operational or production aspects.

Exception, waiver, or modification of this limitation in any year may be approved in writing, including documented supporting analysis, by the Authorized Officer.

Example Resource Categories (*Select or identify category and specific resource value*):

- a. Recreation areas.
- b. Special natural history or paleontological features.
- c. Special management areas.
- d. Section of major rivers.
- e. Prior existing rights-of-way.
- f. Occupied dwellings.
- g. Other (specify).

Guidance

The SPECIAL RESOURCE MITIGATION GUIDELINE is intended for use only in site-specific situations where one of the first three general mitigation guidelines will not adequately address the concern. The resource value, location, and specific restriction must be clearly identified. A detail plan addressing specific mitigation and special restrictions will be required prior to disturbance or development and will become a condition for approval of the permit, plan of development, or other use authorization.

Exception, waiver, or modification of requirements developed from this guideline must be based upon environmental analysis of proposals (for example, activity plan, plans of development, plans of operation, Applications for Permit to Drill) and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

5. No Surface Occupancy Guideline

No surface occupancy (NSO) will be allowed on the following described lands (*legal description*) because of (*resource value*).

Example Resource Categories (*Select or identify category and specific resource value*):

- a. Recreation areas (such as campgrounds, historic trails, national monuments).
- b. Major reservoirs/dams.
- c. Special management area (such as areas of critical environmental concern, known threatened or endangered species habitat, wild and scenic rivers).
- d. Other (specify).

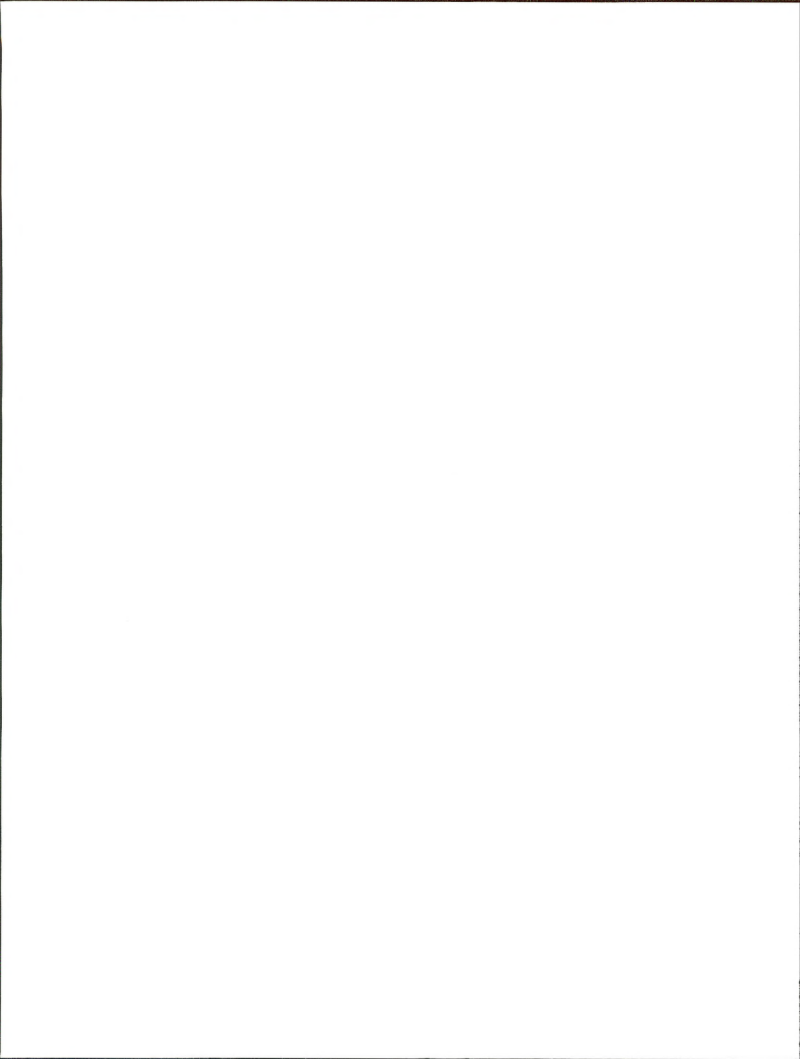
Guidance

The NO SURFACE OCCUPANCY (NSO) MITIGATION GUIDELINE is intended for use only when other mitigation is determined insufficient to adequately protect the public interest and is the only alternative to "no development" or "no leasing." The legal subdivision and resource value of concern must be identified and be tied to an NSO land use planning decision.

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Waiver of or exception(s) to the NSO requirements will be subject to the same test used to initially justify its imposition. If, upon evaluation of a site-specific proposal, it is found that less restrictive mitigation would adequately protect the public interest or value of concern, then a waiver or exception to the NSO requirement is possible. The record must show that because conditions or uses have changed, less restrictive requirements will protect the public interest. An environment analysis must be conducted and documents (for example, environmental assessment or environmental impact state, as necessary) in order to provide the basis for a waiver or exception to the NSO planning decision. Modification of the location(s) to which it applied. If the waiver, exception, or modification is found to be consistent with the intent of the planning decision, it may be granted. If found inconsistent with the intent of the planning decision, a plan amendment would be required before the waiver, exception, or modification could be granted.

When considering the "no development" or "no leasing" option, a rigorous test must be met and fully documented in the record. This test must be based upon stringent standards described in the land use planning document. Since rejection of all development rights is more severe than the most restrictive mitigation requirements, the record must show that consideration was given to development subject to reasonable mitigation, including "no surface occupancy." The record must also show that other mitigation was determined to be insufficient to adequately protect the public interest. A "no development" or "no leasing" decision should not be made solely because it appears that conventional methods of development would be unfeasible, especially where an NSO restriction may be acceptable to a potential permittee. In such cases, the potential permittee should have the opportunity to decide whether or not to go ahead with the proposal (or accept the use authorization), recognizing that an NSO restriction is involved.



GLOSSARY

ACTIVE DUNE. A hill or accumulation of sand shaped by wind. A dune is active when constantly changing form under wind currents. Generally, an active dune is bare of vegetation.

ALKALINE-SALINE SOIL. Soil with a pH greater than 7.0 throughout most or all of it occupied by plant roots; and enough soluble salts to impair plant productivity.

ALLOWABLE CUT. The amount of timber considered available for cutting during a specified period (year, decade, etc.).

ALLUVIUM. Unconsolidated fragments from rocks or minerals, moved from their place of origin and deposited by running water; including gravel, sand, silt, clay, and mixtures of these materials.

ANIMAL UNIT MONTH (AUM). The amount of forage to sustain one mature cow or the equivalent, based on an average daily forage consumption of 26 pounds of dry matter per day. The equivalent animal units for other ungulate species, based on a weight conversion (3 percent body weight per day), are: 10.5 for antelope; 7.5, deer; 2.1, elk; 1.2, moose; 0.9, wild horses; and 5.2, sheep.

ANTICLINAL. Inclined toward each other; an anticline is a unit of folded strata that is convex upward. In simple anticlines the beds are oppositely inclined. In more complex types the limbs of strata may dip in the same direction.

BADLAND. Surface features characterized by sharp erosional scar sculpture of weak rocks, forming steep, furrowed, and fantastically shaped hills, labyrinth-like drainage patterns, and normally dry watercourses.

BOARD FOOT. A measurement of the volume of a tree which is based on a block of wood one foot on each side and one inch thick.

CHECKERBOARD LAND PATTERN. Alternating sections of federally owned lands with private or State lands on either side of the Union Pacific railroad in southwestern Wyoming. This pattern of land ownership looks like a checkerboard on maps using different colors to show land status.

CHERRYSTEMMED. A WSA boundary which is drawn around a dead-end road or other linear feature to exclude it from the WSA.

CLINOPTILOLITE. A zeolite mineral occurring in the Bridger Formation; a hydrous aluminosilicate formed by the alteration of volcanic tuffs and glasses. Zeolites are used as absorbents in drying, in air separation, in water treatment, in the paper industry, as a dietary supplement for livestock, and as a soil conditioner.

CONSUMPTIVE USE. Recreation activities which consume natural resources. Hunting and fishing are regarded as consumptive recreation because wildlife are consumed. Rock-hounding is consumptive because nonrenewable resources are removed.

EOLIAN ICE-CELLS. Perennial ice formed from snowfall and insulated from summer heat by a cover of windblown sands. This ice feeds small ponds within the dunes.

ERODIBILITY. The relative ease with which one soil erodes under specified conditions of slope, as compared with other soils under similar conditions.

FLUVIATILE. Produced by river action; belonging to a river.

HUNTER-DAY. The presence of one person in an area for the purpose of engaging in a hunting activity during all or part of a calendar day.

INTERMITTENT STREAM. A stream or part of a stream that flows only in direct response to precipitation. It receives little or no water from springs and is dry for most of the year.

LACUSTRINE. Produced by or formed in a lake or lakes.

LEASABLE MINERALS. Minerals subject to lease by the Federal Government; include oil and gas, coal, phosphate, sodium, potash, and oil shale, as well as geothermal resources.

LOCATABLE MINERALS. Minerals subject to disposal and development through the Mining Law of 1872 (as amended). Generally includes metallic minerals such as gold and silver and other materials not subject to lease or sale.

MULTIPLE USE. In Section 103 of FLPMA, "... management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific, and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with relative consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest return or the greatest unit output."

NATIONAL REGISTER OF HISTORIC PLACES. A list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture.

NATURAL EROSION. The wearing away of the land surface by running water, waves, moving ice and wind, or by such processes as mass wasting and corrosion (solution and other chemical processes) as a result of natural, versus manmade, processes.

NATURALNESS. In Section 2(c) of the Wilderness Act, the wilderness characteristic in which an area "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable."

NONIMPAIRMENT CRITERIA. The criteria by which temporary impacts in a WSA can be rehabilitated to be substantially unnoticeable; the damaged environmental systems are capable of being rehabilitated to essentially the condition which existed on the date the activity was approved by BLM; and rehabilitation can be accomplished practically by the time of Congressional designation of the area as wilderness or, in the case of new mineral activities, within five years of designation.

PERENNIAL STREAM. A stream or reach of a stream which flows continuously throughout the year, and whose upper surface generally stands lower than the water table in the region adjoining the stream. A permanent or live stream.

PLAYA. The usually dry, nearly level, lake plain that occupies the lowest parts of closed depressions, such as those on intermontane basin floors. Temporary flooding occurs in response to precipitation runoff, forming broad, shallow sheets of water which quickly gather and almost as quickly evaporate.

PUBLIC LAND. Land administered by the Bureau of Land Management.

GLOSSARY

RAPTOR. A bird of prey, such as an eagle, hawk, or owl.

RARE SPECIES. Wildlife species whose populations are consistently small and widely dispersed, or whose ranges are restricted to a few localities, such that any appreciable reduction in numbers, habitat availability, or habitat condition might lead toward extinction.

RIPARIAN. Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used to refer to the plants of all types that grow rooted in the water table or streams, ponds, springs, etc.

SENSITIVE SPECIES. Wildlife species whose numbers are declining so rapidly that official listing as threatened or endangered pursuant to Section 4 of the Endangered Species Act may become necessary as a conservation measure. Declines may be due to one or more factors, including: destruction, modification, or curtailment of the species' habitat or range; overutilization for commercial, sporting, scientific, or educational purposes; disease or predation; the inadequacy of existing regulatory mechanisms; or other factors.

STABILIZED DUNE. A dune protected from further wind action by a cover of vegetation or by cementation of the sand.

STIPULATION. A restriction placed on an oil and gas lease or other use authorization to protect other resources (e.g., a seasonal restriction to protect big game in their winter range or in their calving areas). The restriction precludes or restricts activities.

SPECIAL FEATURES. Values present in an area under consideration for wilderness, such as ecological, geological, or other features of scientific, educational, scenic, or historical value. They are not required for wilderness designation, but their presence enhances an area's wilderness quality.

THREATENED AND ENDANGERED SPECIES. As defined by the Endangered Species Act of 1973 as amended (P.L. 93-205; 87 Stat. 884), an endangered species means "any species which is in danger of extinction throughout all or a significant portion of its range" and a threatened species means "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Whether a species is threatened or endangered is determined by the following factors: (1) present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, sporting, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; or (5) other natural or human-made factors.

THRUST BELT. An intensely faulted belt of mountain ranges. Thrust faults are low angle ruptures in the earth's crust that relieved deep compressional forces. The surface expression of this tectonic activity is westward dipping formations exposed in ridges or mountain ranges. Each ridge moved horizontally and vertically to its position along at least one thrust fault.

TOPOGRAPHIC RELIEF. The positions and elevations of the natural or manmade features of an area that describe the configuration of its surface.

TRONA. A naturally occurring sodium sesquicarbonate that was formed in ancient saline lakes. It is generally honey or light brown in color, depending upon the impurities present. It is the major natural source of soda ash.

VEGETATION MANIPULATION. Land treatment projects designed to improve the growth of more desirable plant species. Biological, chemical, or mechanical methods of vegetation removal, including prescribed burns, are used.

VISITOR-DAY. The presence of one or more persons on an area of land or water for the purpose of engaging in one or more recreational activities for a period of time aggregating 12 hours.

WITHDRAWAL. Removal or withholding of public lands, by statute or Secretarial order, from operation of some or all of the public land laws. A mineral withdrawal includes public lands potentially valuable for leasable minerals, precluding the disposal of the lands except with a mineral reservation clause unless the lands are found not to contain a valuable deposit of minerals.

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