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WILDERNESS SUPPLEMENT
to the
**DRAFT RESOURCE MANAGEMENT PLAN/
ENVIRONMENTAL IMPACT STATEMENT**
for the
MEDICINE BOW RESOURCE AREA
RAWLINS DISTRICT, WYOMING

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Suppl.

Prepared by:
U.S. Department of the Interior
Bureau of Land Management
1987



Wyoming State Director

4-13-97

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ABBREVIATIONS

[Note: Many of these terms are further defined in the Glossary.]

ACEC	Area of critical environmental concern
BLM	Bureau of Land Management
CDNST	Continental Divide National Scenic Trail
CFR	Code of Federal Regulations
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
HMP	Habitat Management Plan
NNL	National Natural Landmark
NWPS	National Wilderness Preservation System
ORV	Off-Road Vehicle
RAMP	Recreation Area Management Plan
RMP	Resource Management Plan
USDI	United States Department of the Interior
USFS	United States Forest Service
WGFD	Wyoming Game and Fish Department
WSA	Wilderness Study Area

Summary

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SUMMARY

Introduction

This Environmental Impact Statement (EIS) is an analysis of the effects of wilderness designation or nondesignation alternatives on 11,695 acres of public land in three wilderness study areas (WSAs). The study areas are all located in Carbon County. The Encampment River Canyon is in southern Carbon County, two miles south of Encampment; the Bennett Mountains WSA is in north central Carbon County east of Seminoe Dam; and the Prospect Mountain WSA is in southern Carbon County approximately 16 miles southeast of Encampment and 8 miles north of the Colorado-Wyoming border. This EIS was prepared in response to Section 603 of the Federal Land Policy and Management Act (FLPMA) which directs the Bureau of Land Management (BLM) to inventory, study, and report to Congress, through the Secretary of Interior and the President, those public lands suitable for preservation as wilderness.

Major Issues and Concerns

The wilderness review for the Medicine Bow Resource Area has involved many people. Based on contacts with industry, organizations, individuals, federal, state and local agencies, the following areas of concern and controversy were identified for the three WSAs.

1. Effects on wilderness values, including naturalness, solitude, and primitive and unconfined recreation.
2. Effects on recreational opportunities, including the use of motorized vehicles and the quality of recreation.
3. Effects on mineral exploration and development-oil and gas and locatable minerals.
4. Effects on wildlife including elk, mule deer, bighorn sheep, and fish populations (Encampment River Canyon WSA only).
5. Effects on livestock grazing and grazing management (Encampment River Canyon WSA only).
6. Effects on forest resources and forest management (Prospect Mountain WSA only).

7. Effects on wildlife including elk and mule deer (Prospect Mountain WSA only).

Alternatives Including the Proposed Action

This EIS deals with three wilderness study areas and examines two alternatives including the proposed action for each WSA. The alternatives analyzed include All Wilderness or No Action; No Wilderness.

Encampment River Canyon WSA (WY-030-301)

Unit Description - The Encampment River Canyon WSA consists of 4,547 acres of public land. No private or state inholdings, and no split-estate lands are located within the WSA boundary. The topography of the entire unit is mountainous with steep canyons and rocky slopes. Elevations range from 7,200 feet to 8,545 feet. The dominant tree species within the unit are limber pine, lodgepole pine, cottonwood, and aspen.

Proposed Action; No Action; No Wilderness

Under this alternative, the Encampment River Canyon WSA would be recommended unsuitable for designation as wilderness. Resource management in the WSA would emphasize protection and enhancement of recreational, wildlife, fisheries, and scenic values.

All Wilderness Alternative

Under this alternative, the Encampment River Canyon WSA would be recommended suitable for designation as wilderness. The entire WSA would

SUMMARY

be closed to ORVs. Existing livestock management practices would be continued.

Prospect Mountain WSA (WY-030-303)

Unit Description - The Prospect Mountain WSA consists of 1,145 acres of public land. No private or state inholdings, and no split-estate lands are located within the WSA boundary. The topography of the entire unit is mountainous with dense forest cover and riparian areas. Elevations range from 7,400 feet to 8,430 feet.

Proposed Action - All Wilderness

Under this alternative, the Prospect Mountain WSA would be recommended suitable for designation as wilderness. Activities such as road building, timber harvesting, the use of motorized equipment and vehicles and mining would be prohibited.

No Action: No Wilderness

Under this alternative, the Prospect Mountain WSA would be recommended unsuitable for designation as wilderness. The WSA would be managed for dispersed recreation, wildlife habitat, forest production, and mineral development.

Bennett Mountains WSA (WY-030-304)

Unit Description - The Bennett Mountains WSA consists of 6,003 acres of public land. No private or state inholdings, and no split-estate lands are located within the WSA boundary. There are three types of topography in the WSA: the mountain plateau/ridges; the steep rock ledges; and the many tributary draws. Elevations range from 6,600 feet to 8,000 feet.

Proposed Action - No Action: No Wilderness

Under this alternative, the Bennett Mountains WSA would be recommended unsuitable for designation as wilderness. The WSA would be managed for dispersed recreation.

All Wilderness Alternative

Under this alternative, the Bennett Mountains WSA would be recommended suitable for designation as wilderness. Management would provide for protection and preservation of the area's natural conditions and wilderness character.

Chapter One

**Purpose and Need;
Issues and Criteria**

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CHAPTER 1

PURPOSE AND NEED; ISSUES AND CRITERIA

PURPOSE AND NEED FOR ACTION

The Medicine Bow Resource Area Wilderness Environmental Impact Statement (EIS) is being prepared in response to Section 603 of the Federal Land Policy and Management Act (FLPMA), October 21, 1976. This law directs the Bureau of Land Management (BLM) to inventory, study, and report to Congress, through the Secretary of the Interior and the President, the public lands preliminarily suitable for inclusion in the National Wilderness Preservation System (NWPS).

This EIS satisfies the study requirements for three of the 40 BLM wilderness study areas in Wyoming. According to FLPMA, the Secretary must report his recommendations to the President by October 21, 1991. The President has until October 21, 1993, to send his recommendations to Congress; only Congress has the authority to designate any of the study areas as wilderness or release them from study status as nonsuitable.

The purpose of this EIS is to analyze the effects of present or potential resource uses in three WSAs in central Wyoming. The WSAs are Encampment River Canyon (WY-030-301), Prospect Mountain (WY-030-303), and Bennett Mountains (WY-030-304).

PLANNING CRITERIA AND QUALITY STANDARDS

BLM planning regulations provide guidance for the development of Resource Management Plans (RMPs). These RMPs establish the combinations of land uses and resource uses, related levels of investment and production or protection to be maintained, and general management practices and constraints for the various public land resources. Public participation is an integral part of the RMP process. The nine steps of the RMP process are listed below. A more complete

description of the planning process is included in the Resource Management Plan/Environmental Impact Statement for the Medicine Bow and Divide Resource Areas (USDI, BLM forthcoming).

- Step 1. Identification of Issues
- Step 2. Development of Planning Criteria
- Step 3. Collection of Inventory Data
- Step 4. Analysis of the Management Situation
- Step 5. Formulation of Alternatives
- Step 6. Estimation of Effects of Alternatives
- Step 7. Selection of the Preferred Alternative
- Step 8. Selection of the Resource Management Plan
- Step 9. Monitoring and Evaluation

During the development of RMPs, criteria are developed for each resource element (such as wilderness values) that represents an issue in the planning effort. National planning criteria for the wilderness study process have been developed by BLM. All BLM wilderness recommendations, both suitable and nonsuitable for preservation as wilderness, are developed on the basis of the two planning criteria and six quality standards listed below.

Criterion Number 1, Evaluation of Wilderness Values

Consider the extent that each of the following contributes to the overall value of an area for wilderness purposes.

1. Mandatory wilderness characteristics: size, naturalness and outstanding opportunities for solitude or primitive, unconfined recreation.
2. Special features: presence or absence and quality of ecological, geological or other features of scientific, educational, scenic, or historical value.
3. Multiple-resource benefits: benefits to other multiple-resource values and uses that only wilderness designation of the area could ensure.

PURPOSE AND NEED

4. Diversity: the extent that wilderness designation of the area under study would contribute to expanding the diversity of the NWPS from the standpoint of the factors listed below:
 - a. Expanding the diversity of natural systems and features, as represented by ecosystems and landforms.
 - b. Assessing the opportunities for solitude or primitive recreation within a day's driving time of major population centers.
 - c. Balancing the geographic distribution of wilderness areas.

Criterion Number 2, Manageability

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

Standard Number 1, Energy Mineral Resource Values

Recommendations as to an area's suitability or nonsuitability for wilderness designation will reflect a thorough consideration of any identified or potential energy and mineral resource values.

Standard Number 2, Impacts on Other Resources

Consider the extent to which other resource values or uses of the area would be foregone or adversely affected as a result of wilderness designation.

Standard Number 3, Impact of Nondesignation on Wilderness Values

Consider the alternative use of land under study if the area were not designated as wilderness, and the extent to which wilderness values of the area would be foregone or adversely affected as a result of this use.

Standard Number 4, Public Comment

In determining whether an area is suitable or nonsuitable for wilderness designation, the BLM wilderness study process will consider comments

received from interested and affected public groups at all levels—local, state, regional, and national. BLM will develop its recommendations by considering public comment in conjunction with its analysis of a wilderness study area's multiple resource and social and economic values and uses.

Standard Number 5, Local, Social, and Economic Effects

In determining whether an area is suitable or nonsuitable for wilderness designation, BLM will give special attention to adverse or favorable social and economic effects, as identified through the wilderness study process, that wilderness designation will have on local areas.

Standard Number 6, Consistency with Other Plans

In determining whether an area is suitable or nonsuitable for wilderness designation, BLM will consider the extent to which the recommendation is consistent with officially approved and adopted resource-related plans of other federal agencies, state and local governments, and Indian tribes (and the policies and programs contained in such plans), as required by FLPMA and BLM planning regulations.

WILDERNESS STUDY

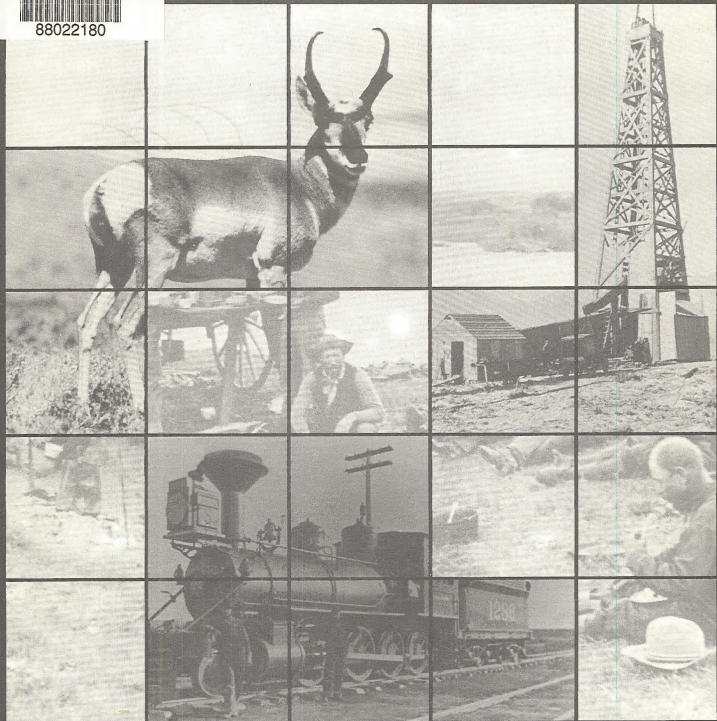
The three WSAs covered by this EIS were identified during BLM's intensive wilderness inventory, which was completed in November 1980. The RMP process for the Medicine Bow Resource Area began in 1985. This EIS, in conjunction with congressional action, will complete the resource and land use guidance in the RMP.

Detailed, site-specific management plans for the WSAs in the event they are designated as wilderness are not presented. Instead, a wilderness management plan will be developed for any WSA that is designated, based on any special wilderness management considerations incorporated by Congress. Areas not designated as wilderness and released by Congress will be returned to normal multiple-use management without the constraints of BLM's Wilderness Interim Management Policy.

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Wilderness Supplement
Draft Resource Management Plan/EIS

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**DRAFT WILDERNESS
ENVIRONMENTAL IMPACT STATEMENT
FOR THE MEDICINE BOW RESOURCE AREA
Carbon County, Wyoming**

Abstract

This draft wilderness environmental impact statement considers the suitability or nonsuitability of three wilderness study areas (WSAs) in the Medicine Bow Resource Area for inclusion in the National Wilderness Preservation System.

The proposed action for each of the three study areas is:

Bennett Mountains (WY-030-304) - No Wilderness Alternative
Encampment River Canyon (WY-030-301) - No Wilderness Alternative
Prospect Mountain WSA (WY-030-303) - All Wilderness Alternative

To comment, or for further information, contact the following:

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Bureau of Land Management
P.O. Box 670
Rawlins, Wyoming 82301
(307) 324-7171

Comments will be accepted for 90 days following the date that the Environmental Protection Agency publishes the notice of filing of this draft in the *Federal Register*.

PURPOSE AND NEED

As a result of a decision by the Secretary of Interior on December 30, 1982, changes were made in the wilderness study procedures (Instruction Memorandum WO-83-138). Two WSAs were dropped from further consideration because they contained fewer than 5,000 acres: Encampment River Canyon (4,547 acres) and Prospect Mountain (1,145 acres). In 1985, through a federal court action, these two areas were reinstated as WSAs and are being considered in this EIS for designation as wilderness (see map 1).

The three areas being studied are located in Carbon County. The natural features in these areas are quite diverse, ranging from granite mountains nearly barren of vegetation to aspen/pine woodlands and deep, rugged canyons. Elevations range from a low of 6,600 feet in the Bennett Mountains to 8,545 feet on the ridges in the Encampment River Canyon.

These WSAs constitute approximately one-half of 1 percent of the public land in the Medicine Bow Resource Area and cover a total of 11,695 acres. Table 1 lists the areas and acreages under wilderness study in the Medicine Bow Resource Area.

TABLE 1
LIST OF WILDERNESS STUDY AREAS

Wilderness Study Area	Acres ¹
Encampment River Canyon WY-030-301	4,547
Prospect Mountain WY-030-303	1,145
Bennett Mountains WY-030-304	6,003
TOTAL	11,695

¹ All lands within the WSAs are public lands. All minerals underlying the WSAs are federally owned.

MAJOR ISSUES AND CONCERNS

A number of issues have been identified through public participation and by BLM personnel. The issues were used to guide formulation of management alternatives for each

WSA and to guide the analysis in this EIS. The issues for each WSA are listed below. Each issue reflects concerns about the effects of wilderness designation or no wilderness designation.

Issues for the Encampment River Canyon WSA

1. Effects on wilderness values, including naturalness, solitude, and primitive and unconfined recreation.
2. Effects on recreational opportunities, including the use of motorized vehicles and the quality of recreation.
3. Effects on wildlife including elk, mule deer, bighorn sheep, and fish populations.
4. Effects on livestock grazing and grazing management.
5. Effects on mineral exploration and development-oil and gas and locatable minerals.

Issues for the Prospect Mountain WSA

1. Effects on wilderness values, including naturalness, solitude, and primitive and unconfined recreation.
2. Effects on recreational opportunities, including the use of motorized vehicles and the quality of recreation.
3. Effects on wildlife including elk and mule deer.
4. Effects on forest resources and forest management.
5. Effects on mineral exploration and development-oil and gas and locatable minerals.

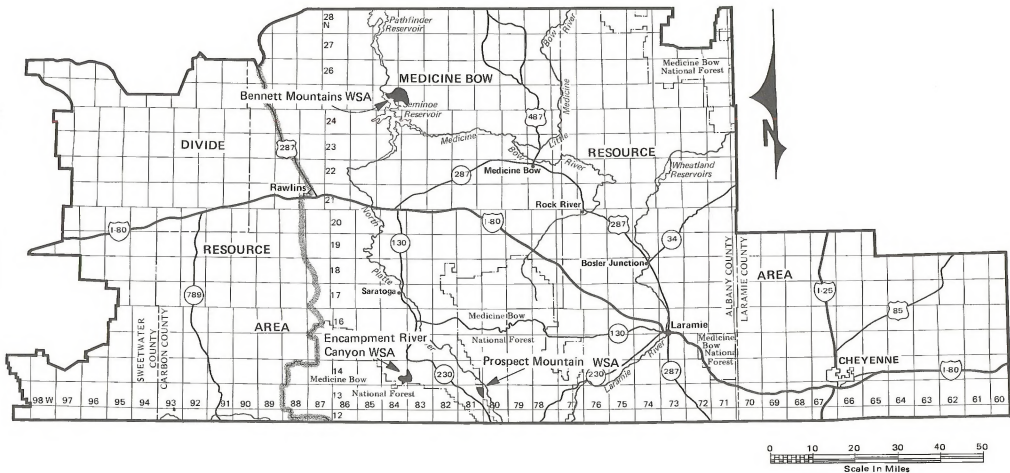
Issues for the Bennett Mountains WSA

1. Effects on wilderness values, including naturalness, solitude, and primitive and unconfined recreation.
2. Effects on recreational opportunities, including the use of motorized vehicles and the quality of recreation.
3. Effects on mineral exploration and development-oil and gas and locatable minerals.

Concerns

The following concerns were raised during the scoping process for this EIS.

1. Wilderness designation would eliminate vehicular access and would be detrimental to hunting and other recreation; elderly or handicapped individuals would not be able to use the wilderness areas. The effect of wilderness designation on recreational opportunities is addressed as an issue in this EIS.



Map 1
 LOCATIONS OF WILDERNESS STUDY AREAS
 Medicine Bow Wilderness Supplement

PURPOSE AND NEED

2. Wilderness designation would result in use beyond the optimal level for the area, which would result in a decrease in the quality of the area. This concern is not addressed as an issue in this EIS. Wilderness designation would not be expected to result in an increase in use beyond optimal levels in any of the WSAs. If it did, specific management plans would be developed to prevent degradation of the quality of the areas.
3. Wilderness designation would preserve the outstanding opportunities for primitive recreation and solitude and preserve high-quality scenic values and significant cultural resources. The effect of wilderness designation on opportunities for primitive recreation and solitude and high-quality scenic values is addressed in this EIS. The effect on significant cultural resources is not addressed since BLM has adequate authority to manage cultural resources regardless of the wilderness status of a given area. Effects on significant cultural resources are not expected regardless of the wilderness status of a given area.
4. Wilderness designation might be the only way to ensure long-term protection for wildlife habitat and primitive recreational opportunities. The effect of wilderness designation on wildlife habitat and primitive recreation is addressed in this EIS.
5. The Encampment River Canyon provides high-quality opportunities for recreation, particularly fishing and hunting. Wilderness designation would result in an increase in visitor use with a resultant decrease in quality of recreation activities. This concern is not addressed as an issue in this EIS. Wilderness designation would not be expected to result in an increase in use beyond optimal levels in the Encampment River Canyon. If it did, specific management plans would be developed to prevent degradation of the quality of recreational opportunities.
6. Wilderness designation would ensure that water quality in the Encampment River would remain high, and there would be a positive impact on the trout fishery. This concern is not addressed as an issue in this EIS. Wilderness designation would not materially affect water quality in the Encampment River.
7. Wilderness designation for the WSAs would add acreage in southeastern Wyoming to the NWPS, thereby providing wilderness in closer proximity to residents. Proximity of opportunities for solitude and primitive and unconfined recreation in relation to major population centers is a consideration in making suitability recommendations for WSAs. It is not an environmental issue addressed in this EIS.
8. Wilderness designation for the WSAs would add ecosystems to the NWPS, thereby increasing diversity. Expanding the diversity of natural systems and features in the NWPS is a consideration in making suitability recommendations for WSAs. It is not an environmental issue addressed in this EIS.
9. Wilderness designation for the Prospect Mountain and Encampment River Canyon WSAs would serve as logical extensions to existing USFS wilderness areas located adjacent to or near each WSA. This concern is addressed in this EIS.
10. Wilderness designation would preclude major water development projects. This concern is not addressed in this EIS, because no major water projects are projected within any of the WSAs.

Interim Management Policy

During the wilderness review process and until Congress acts on the President's recommendations, the Secretary of the Interior is required to manage wilderness study areas so as not to impair their suitability for preservation as wilderness, subject to certain exceptions and conditions. The policy and guidelines under which BLM will manage the lands during the wilderness review process is known as the Interim Management Policy.

There are two goals of the Interim Management Policy:

1. To ensure that WSAs, which now satisfy the wilderness definition in Section 2(c) of the Wilderness Act, will satisfy that definition when the Secretary sends his wilderness recommendation to the President and until Congress acts on that recommendation; and
2. To ensure that, by the time the Secretary sends his recommendation to the President, the area's wilderness values are not degraded, compared with the area's values for other purposes, as to significantly constrain the Secretary's recommendation with respect to the area's suitability or nonsuitability for preservation as wilderness.

There are two exceptions to this policy. The first is that existing uses may continue in the same manner and degree as on the date that FLPMA was approved. Such uses are referred to as "grandfathered."

The second exception involves mineral leases that were issued before October 21, 1976, the date FLPMA was passed. If an oil and gas lease was issued before the passage of FLPMA, it would be considered a valid existing right, and the owner of such a lease would be entitled to exercise his right to explore and produce oil and gas, even if that activity were to impair the area's wilderness values. For a further explanation of these rights, copies of the complete Interim Management Policy and Guidelines for Lands under Wilderness Review are available at any BLM office or may be obtained by writing or calling the Rawlins District office.

When Congress decides which WSAs will be designated wilderness and included in the NWPS, those areas not designated wilderness will be released from interim management.

Wilderness Management Policy

BLM's Wilderness Management Policy (available at any BLM office) was published in September 1981. It details BLM's policy on

PURPOSE AND NEED

management of wilderness areas. The wilderness management policy regulates use of designated wilderness and contains information about specific programs, such as livestock grazing, and how they will be affected by a wilderness designation.

The wilderness management policy stipulates that once an area has been designated as wilderness, the provisions of the Wilderness Act of 1964 shall direct its administration and use. According to the Wilderness Act, wilderness areas will be managed to provide for their protection and for the preservation of their natural conditions and wilderness character. It further

provides that wilderness areas are to be devoted to the public purposes of recreational, scenic, scientific, educational, conservational, and historical use.

Congress has provided for certain activities and existing uses to be excepted from the general management provisions of the Wilderness Act. Examples are:

- a. Valid existing rights
- b. Measures requiring emergencies involving the health and safety of persons
- c. Livestock grazing where already established

PART I
ENCAMPMENT RIVER CANYON WSA

Chapter Two

Alternatives

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PART I - ENCAMPMENT RIVER CANYON WSA (WY-030-301)

CHAPTER 2 - ALTERNATIVES

Introduction

Since the pattern of future actions within the WSA cannot be predicted with certainty, assumptions were made to allow for the analysis of impacts under the alternatives. These assumptions are the basis of the impacts identified in this EIS. They are not management plans or proposals, but represent feasible patterns of activities that could occur under the alternatives analyzed.

Alternatives Eliminated from Detailed Study

An alternative to designate only part of the WSA as wilderness was considered. Partial wilderness designation would eliminate that area containing mining claims to avoid potential conflicts with other resource values. However, it was determined that the WSA is too small in size to make any reductions. Also, there are no logical boundaries for partial wilderness.

An alternative to enhance wilderness in the WSA by closing boundary roads and adding additional acreage was considered. However, this would not be feasible since the roads are designated county roads that provide the only vehicle access to public and private lands.

Alternatives Considered in Detail

Two alternatives were analyzed for the Encampment River Canyon WSA: (1) No Action: No Wilderness (the Proposed Action) and (2) All Wilderness. Descriptions of the management direction for the alternatives follow.

Proposed Action - No Action: No Wilderness

Under this alternative, the Encampment River Canyon WSA (4,547 acres) would be recommended as nonsuitable for designation as wilderness. Resource management in the WSA would emphasize protection and enhancement of recreational, wildlife, fisheries, and scenic values.

Wilderness Management

The WSA would not be recommended for wilderness designation and would be subject to actions that would enhance recreation, wildlife, fisheries, and scenic values. No special emphasis would be placed on preservation of wilderness values.

Recreation Management

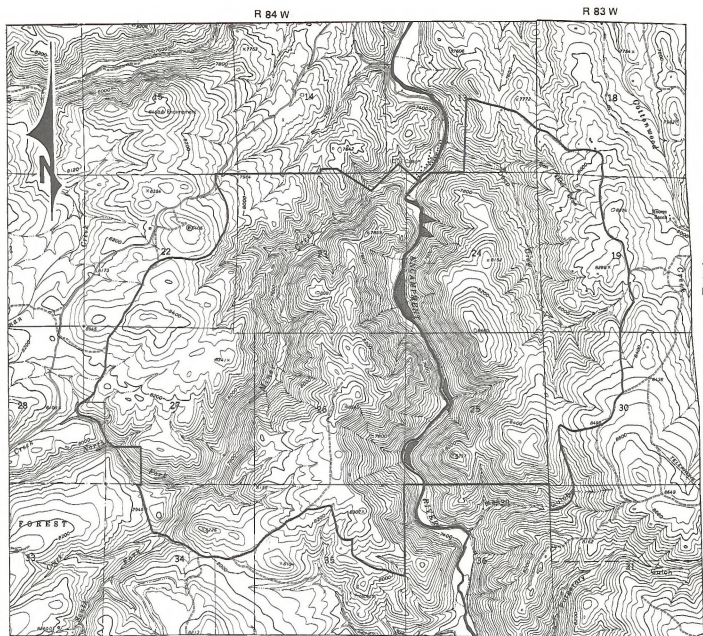
The objective would be to enhance recreational values while protecting and enhancing wildlife, fisheries, and scenic values.

Wooden fence enclosures would be constructed at key points along the Encampment River Trail to allow camping without interference from livestock (see map 2). *There would be no further recreation facilities*

Off road vehicle (ORV) use would continue to be prohibited throughout the area in the winter (December 1 to April 30). During the remainder of the year ORV use would be limited to existing roads and trails with the exception of the Encampment River Trail. The Encampment River Trail would remain closed to motorized traffic at all times.

A Recreation Area Management Plan (RAMP) would be developed for the area to guide development of recreation facilities and use management.

Recreational use of the Encampment River Trail would be expected to increase from the present



- Encampment River Canyon WSA Boundary
- Location of Fences to Exclude Cattle from Camping Areas



Map 2
**LIVESTOCK EXCLOSURES IN THE
 ENCAMPMENT RIVER CANYON WSA**
 Medicine Bow Wilderness Supplement

ALTERNATIVES

level of between 4,000 and 5,000 visitor days to about 6,000 visitor days within the next five years and remain stable thereafter.

Recreational use for the remainder of the area would remain stable at about 2,000 visitor days.

Wildlife Habitat Management

The objective would be to enhance habitat for bighorn sheep, mule deer, and elk. *(S. Antelope)*
~~The existing habitat management plan would be expanded, crucial and high priority habitat would be monitored.~~

Schubert
Mountain shrub/aspens habitats would be treated through prescribed burning or cutting of 200 acres to improve crucial big game range. *will take place on the*

Mountain shrubs would be established in several areas that now have a low density of shrubs (approximately 200 acres).

cutting 200 acres of Mt. Shrub Aspen within Miner Creek Encampment Canyon.

Fisheries Management

The objective would be to improve the trout habitat on about 1 mile of heavily-used waters on the Encampment River and Miner Creek. In other areas, the objective would be to maintain the river's high quality.

The fisheries of Miner Creek and the Encampment River would be monitored to determine whether habitat degradation is occurring. If degradation of habitat is detected (for example, if cattle use were degrading stream banks and vegetation), temporary fencing would be used to rehabilitate the area.

It's anticipated
~~50 boulders would be placed in the Encampment River to create pools and provide hiding cover for trout. 20 pool structures would be placed in lower Miner Creek to improve pool and spawning habitat for trout. These actions would require the use of motorized heavy equipment.~~

Under this alternative, BLM would not recommend a change in the management concept of basic yield where the fishery may be supported by stocking if necessary.

Livestock Grazing Management

The objective would be to maintain current grazing levels and management direction.

Existing livestock management practices would be continued. Cattle use would be authorized and managed at existing levels. Rangeland monitoring studies would be continued, and new studies would be implemented to determine what adjustments in cattle use are needed.

~~No range improvement projects are planned, however, it is anticipated that the livestock operators in the area would propose projects to solve site-specific problems within the WSA. It is anticipated that two or three springs and the construction of approximately five miles of allotment boundary fence would be required to implement management systems on the four allotments. New range improvement projects would be designed to consider scenic, wildlife, and recreational values in the WSA. Design considerations would include the use of let-down fences to allow wildlife movement and careful location of developments and selection of materials to mitigate potential visual intrusions.~~

One and one-half miles of existing fence within the WSA would be maintained. *(see page 3)*

Minerals Management - Oil and Gas and Locatables

New oil and gas leases would be issued subject to standard protection requirements for surface-disturbing activities (available from any BLM office in Wyoming). No drilling is expected because of the low potential for oil and gas accumulation and the difficulty of access.

The existing 17 post-FLPMA mining claims would be managed subject to the Surface Management Regulation of 43 CFR 3809 governing surface management of public lands under U. S. mining laws. New mining claims would be allowed and would be managed the same as existing claims. Portions of the area could undergo exploratory drilling of other types of exploration. No mining is expected due to an unfavorable economic outlook, the geology of the WSA, and a historical lack of ore shipments.

All Wilderness Alternative

Under this alternative, the Encampment River Canyon WSA (4,547 acres) would be recommended as suitable for designation as wilderness. Management of the area would be guided by BLM's Wilderness Management Policy, issued

ALTERNATIVES

September 24, 1981. Management would provide for protection and preservation of the area's natural conditions and wilderness character.

Management actions for recreation, wildlife and fisheries, livestock grazing and minerals would be constrained to ensure that wilderness values were not impaired.

Wilderness Management

The objective would be to protect and preserve the area's natural conditions and wilderness character.

Activities that would impair the wilderness character of the area such as construction of facilities and use of motorized vehicles, would be restricted. Specific restrictions are included in the following discussions.

A wilderness management plan would be written for the area, outlining specific management guidance. The plan would be written according to the guidelines in BLM's Wilderness Management Policy and BLM Manual Section 8561, Wilderness Management Plans, available at most BLM offices.

Recreation Management

The objective would be to provide opportunities for primitive forms of recreation including hiking, hunting, fishing, and wildlife viewing. *No recreation facilities are planned.*

The entire WSA would be closed to ORVs. Approximately 5 miles of two-track trails presently available for ORV use would be affected.

Recreational use of the Encampment River Trail would be expected to increase from the present level of between 4,000 and 5,000 visitor days to about 6,000 visitor days within the next five years and remain stable thereafter.

Recreational use of the remainder of the area would decrease from 2,000 visitor days to 1,000 visitor days as a result of the ORV closure.

Wildlife Habitat Management

The objective would be to maintain or enhance habitat for bighorn sheep, mule deer, and elk within the constraints of BLM's Wilderness Management Policy.

Big game habitat and populations in the WSA would be assessed and monitored to determine the distribution and interaction of big game species. The extent of competition between cattle and big game would be determined for the area.

Actions would be undertaken if wildlife habitat problems were documented. For example, if crucial winter range were deteriorating because of cattle use, temporary fencing or change in season of use might be required. Any action taken would be consistent with BLM's Wilderness Management Policy. Thus, certain actions such as the alteration of vegetation using motorized equipment would be prohibited.

Fisheries Management

The objective would be to manage existing trout habitat and the naturally-reproducing trout populations to preserve the opportunity to catch wild trout in a wilderness setting. Trout habitat would be managed within nonimpairment guidelines to enhance its quality and productivity.

Trout habitat and populations would be monitored to determine whether they are being affected by activities such as recreation or cattle grazing. If problems were detected, actions would be undertaken to resolve the conflict within the constraints of BLM's Wilderness Management Policy. For example, if cattle use were degrading stream banks and vegetation, temporary fencing would be used to rehabilitate the area.

The Wyoming Game and Fish Department would be requested to manage the Encampment River under its "wild trout" management concept to ensure continued opportunity to catch wild trout.

Livestock Grazing Management

The objective would be to maintain current grazing levels and management direction within the constraints of BLM's Wilderness Management Policy.

Existing livestock management practices would be continued. Cattle use would be authorized and managed at existing levels. Rangeland monitoring studies would be continued, and new studies would be implemented to determine what adjustments in cattle use are needed.

No range improvement projects are planned; however, it is anticipated that livestock operators in the area would propose projects to solve site-specific problems within the WSA. It is anticipated that two or three springs and the construction of approximately five miles of allotment boundary fence would be required to implement management systems on the four allotments. New range improvement projects would be carefully designed and constructed to ensure wilderness characteristics are not

ALTERNATIVES

impaired. Design considerations would include the use of let-down fences to allow for wildlife movement and careful location of developments and selection of materials to mitigate potential visual intrusions. Use of motorized equipment for construction of new range improvement projects would be restricted.

One and one-half miles of existing fence within the WSA would be maintained.

Motor vehicle access would be limited to emergencies and when absolutely necessary to maintain range improvements. Routine activities such as feeding, herding, checking cattle, and placing salt blocks would be accomplished without the use of motor vehicles.

Minerals Management - Oil and Gas and Locatables

No new oil and gas leasing would be allowed.

Until the WSA is designated wilderness by Congress, the existing 17 post-FLPMA mining claims would be subject to the interim management policy. This policy allows only activities that do not impair wilderness values. If a discovery is made using nonimpairing methods, then a claimant would be entitled to a patent on those claims. The area would continue to be open to mining location until designation as wilderness.

After the WSA is designated wilderness, the existing 17 post-FLPMA mining claims would be subject to BLM's Wilderness Management Policy. No new mining claims would be allowed. Validity examinations would be required before allowing operations on claims. No mining is expected due to an unfavorable economic outlook, the geology of the WSA, and a historical lack of ore shipments.

Due to constraints imposed by wilderness mgmt. policy, no exploration would be anticipated.

TABLE 2
SUMMARY OF IMPACTS
Encampment River Canyon WSA

Issues	Proposed Action No Action: No Wilderness	All Wilderness
Effects on Wilderness Values	Solitude and naturalness would be somewhat impaired by continued ORV use and implementation of developments for recreation, wildlife, fisheries, and livestock grazing management. Opportunities for primitive recreation would be enhanced by construction of livestock exclosures along the Encampment River Trail.	Naturalness, opportunities for solitude, and opportunities for primitive and unconfined recreation would be protected in the Encampment River Canyon WSA. The scenic quality of the area would be preserved. Closing the area to ORV use would enhance opportunities for solitude and primitive recreation during the entire year.
Effects on Recreational Opportunities	Types of recreational activities would remain unchanged and would be enhanced through elimination of cattle use in the camping areas along the trail and improved fishing and hunting opportunities.	About 1,000 visitor days associated with ORV use would be eliminated. Within five years total recreational use would level off at about 500 fewer visitor days than are projected under current management. There would be no increase in usable habitat and numbers of trout, and the number or size of trout creel from the Encampment River might need to be regulated in the future. Conflicts between cattle and recreationists from concentrated use along the trail would remain.
Effects on Wildlife	Stress and displacement of big game would be reduced as a result of the winter ORV closure. Usable trout habitat and numbers of trout would increase in the Encampment River and Miner Creek as a result of fisheries management actions. About 50 acres of riparian habitat along about one half mile of stream bank would be improved as a result of construction of livestock exclosures along the Encampment River. The quality and quantity of big game forage would increase as a result of vegetation manipulation on crucial winter range.	Stress and displacement of big game would be reduced year round as a result of the ORV closure. Usable trout habitat and numbers of trout would not increase in the Encampment River and Miner Creek since fisheries improvement actions are not proposed.

TABLE 2 (Continued)
SUMMARY OF IMPACTS
Encampment River Canyon WSA

Issues	Proposed Action No Action: No Wilderness	All Wilderness
Effects on Livestock Grazing and Grazing Management	Projected range improvement projects would improve distribution patterns, eliminate uncontrolled drift of cattle between allotments, and provide additional sources of water for cattle. Consideration of scenic, wildlife and recreational values in the design and construction of range improvement projects would raise their costs compared to standard construction.	Compliance with BLM's Wilderness Management Policy would make routine management activities such as herding, checking cattle, or placing salt blocks more expensive and labor intensive as a result of motor vehicle restrictions. It also would make accomplishment of new range improvement projects more expensive and labor intensive. Projected range improvement projects would improve distribution patterns, eliminate uncontrolled drift of cattle between allotments, and provide additional sources of water for cattle.
Effects on Mineral Exploration and Development	There would be no effect on exploration and development of oil and gas or locatable minerals.	The availability of currently unrecognized oil and gas reserves would be forgone. Due to low potential for development the effect on oil and gas exploration and development would be minor. No new mining claims would be allowed, so the availability of currently unrecognized mineral deposits would be forgone. The requirements of BLM wilderness management policy would not prevent development of any of the existing claims, but would make development more expensive and labor intensive.



PART I
ENCAMPMENT RIVER CANYON WSA

Chapter Three

Affected Environment

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PART I - ENCAMPMENT RIVER CANYON WSA (WY-030-301)

CHAPTER 3 - AFFECTED ENVIRONMENT

Introduction

There are many environmental components that would be unaffected by either of the alternatives for management of the Encampment River Canyon WSA. Since they would not be affected, they are not described in detail in this chapter. These environmental components are covered briefly in the following paragraphs.

Many environmental components are not present in the WSA and therefore would not be affected. These components include areas of critical environmental concern (ACEC), coal resources, nonenergy leasable minerals, floodplains, prime or unique farmlands, wetlands, wild horses, and wild or scenic rivers (designated or proposed).

Other environmental components are present in the WSA, but none of the management actions proposed would affect them. These include air quality, climate, cultural resources, forestry, topography, and water yield.

No lands and realty actions are proposed or projected for the WSA, so none would be affected.

There are no permits for salable minerals in the WSA. Because of inaccessibility and the existence of salable mineral deposits closer to areas where they are needed, salable mineral deposits in the WSA are not considered commercial. Development of salable minerals is not expected. Thus, availability of salable minerals would not be affected.

Restricting ORV use can potentially reduce soil erosion. However, in this WSA, ORV use is relatively light and is dispersed so that effects on soil erosion would be negligible.

Construction of pools in Miner Creek and placement of boulders in the Encampment River could potentially affect water quality during construction. However, these activities would be conducted in such a manner that effects would be minimal during construction and negligible in the long term.

Threatened or endangered species would be unaffected by the management alternatives for the WSA. Endangered bald eagles and peregrine falcons may use the WSA on occasions when hunting or migrating through the area, but the WSA contains no breeding, nesting, or wintering habitat that would be essential to the recovery of either species. The area does not contain any prairie dogs, primary food of black-footed ferrets, so the existence of ferrets in the WSA is unlikely.

General Description

The Encampment River Canyon WSA is located in southern Carbon County, approximately 2 miles south of Encampment, Wyoming and 1 mile north of the U.S. Forest Service Encampment River Wilderness.

The topography of the entire unit is mountainous (see photographs 1 and 2). Steep canyons and rocky slopes dominate the vistas. The Encampment River and a major tributary, Miner Creek, add scenic features to the WSA. Elevations range from 7,200 feet along the Encampment River to 8,545 feet on the high ridges.

Approximately 10 percent of the WSA is forested. Tree species present include limber pine, lodgepole pine, Douglas-fir, subalpine fir, cottonwood and aspen. They occur in pure and mixed stands scattered throughout the WSA.

Lower elevations and drainages are characterized by narrow belts of deciduous trees (cottonwoods, willows, alders), conifer trees (Douglas-fir, true firs), grasses, and forbs bordering the Encampment River.

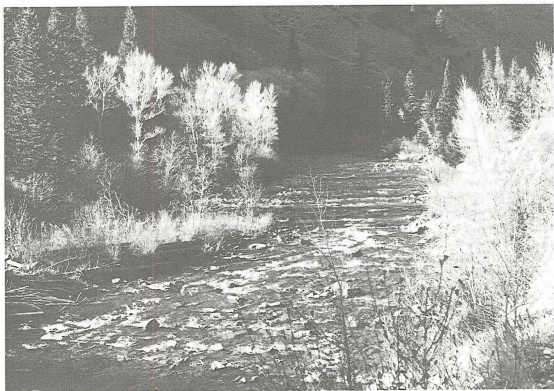
The middle elevations and rocky slopes are primarily composed of bunch grasses interspersed with small shrubs (sagebrush, mountain mahogany, bitterbrush, serviceberry) on steep canyon slopes, and small fingers of trees in the draws and gullies.

The upper elevations and high ridges above the canyon rim generally include the same species as the middle zone, but with smaller proportions of shrubs and less dense stands of grass.

AFFECTED ENVIRONMENT



A stroll along the Encampment River Trail - Encampment River Canyon WSA.



The Encampment River within the canyon - Encampment River Canyon WSA.

AFFECTED ENVIRONMENT

Access to the WSA is very good as public roads are available to most of the boundary. In winter the area can be reached by snowmobile or by cross country skis.

Wilderness Values

Size

The Encampment River Canyon WSA contains 4,547 acres of contiguous public land. The original reported acreage of 3,380 was in error and has been corrected to 4,547 acres. No private or state inholdings, and no split-estate lands are located within the WSA boundary.

Naturalness

Most of the WSA is in a natural state. A fence line crosses one half of the WSA, but its location is not intrusive. The area also has a few two-track trails, remains of two old cabins and a river dam, and several small prospect pits and tunnels, but these do not detract from the natural values. These intrusions blend into the overall view and are not noticeable from a distance. They do not impair the wilderness character of the WSA.

The International Order of Odd Fellows (IOOF) has developed a private parcel of land adjacent to the WSA along the river; however, due to screening provided by trees, rock outcrops, and steep canyon walls, the area is not noticeable from within the WSA. The development does not impair the wilderness character of the WSA.

Upstream from the WSA, the USFS Encampment River Wilderness encompasses a large portion of the Encampment River drainage. Further upstream, in Colorado, the river is proposed for wild and scenic river designation.

Outstanding Opportunities for Solitude and/or a Primitive Unconfined Type of Recreation

The WSA offers outstanding opportunities for solitude. The deep canyons and high rocky ridges provide topographic screening, and the vegetation of the area contributes further screening. At current and projected levels of use visitors to the area would have ample opportunity to avoid the sights and sounds of other visitors to the WSA, with occasional encounters along the trail.

Opportunities for primitive and unconfined recreation are outstanding. Many people currently use the area for hiking, backpacking, horseback riding, hunting, fishing, rockhounding, wildlife viewing, photography, and sightseeing. The section on "Recreation Resources" contains a discussion of current recreational use in the WSA.

The Wyoming Game and Fish Department (WGFD) has classified the Encampment River as very good trout waters with statewide importance.

The Encampment River Trail, which is managed by the U. S. Forest Service (USFS), parallels the river and provides access to the entire length of the river. The trail is closed to motorized vehicle use year round, and the entire WSA is closed to motorized traffic in the winter for big game protection. These restrictions enhance opportunities for solitude and primitive recreation.

The trail also has been mentioned as a potential connector trail to the Continental Divide National Scenic Trail (CDNST) to which it may intersect when the CDNST route is established.

The trail provides access to the USFS Encampment River Wilderness, which is upstream. Conflicts between cattle and campers occur along the trail because cattle congregate in some of the best campsites (relatively flat areas near water). Vegetation in these areas has been reduced, and concentrations of cow manure have led to aesthetic, sanitation, and insect problems.

In conjunction with the trail, the BLM has developed and maintains the Encampment River Trailhead just outside the WSA. This trailhead provides a restroom, parking, picnicking and primitive camping facilities. The trailhead enhances opportunities for primitive recreation within the WSA by improving access.

Special Features

The Encampment River Canyon contains sites associated with early exploration and mining activities of regional historical importance.

A one mile wide corridor along the Encampment River is proposed for National Natural Landmark (NNL) designation. A portion of the proposed NNL lies within the WSA.

The canyon is highly scenic. It contrasts sharply with the color and texture of the surrounding environment, the heavily forested areas to the south and the desert environment to the north.

AFFECTED ENVIRONMENT

The area has a Class II Visual Resource Management rating.

Recreational Resources

The Encampment River Canyon WSA offers opportunities for a great variety of recreational activities, including fishing, hunting, backpacking, hiking, horseback riding, wildlife viewing and photography, camping, rock hounding, and sightseeing. The river canyon attracts recreationists from Wyoming and the neighboring states of Colorado, Nebraska, and Utah.

Access to the WSA is very good either by vehicle, on foot or on horseback. The Encampment River Trail provides access to the USFS Encampment River Wilderness, which lies upstream. Development of the Encampment River Trailhead, just outside the WSA, began in 1980. A bridge was constructed at the trailhead. Prior to that, the trail was accessible to foot traffic by wading the river. The trail is heavily used throughout the warmer months. According to counter readings, the trail's popularity has grown each summer since development of the trailhead. In 1983, the use was estimated at 2,000 visitor days. By 1984 this figure had doubled. Trail use is projected to level off at about 6,000 visitor days within the next five years.

The trail is closed to motorized vehicle use year round, and the entire WSA is closed to motorized traffic in the winter (December 1 to April 30) under an emergency (temporary) ORV closure.

Fishermen have excellent foot access upstream via the Encampment River Trail. All waters within the study area are open to yearlong fishing. There is a lack of data on exact fishing use and harvest. Available estimates indicate that there are 20 fisherman days per mile, per year on the Encampment River and 5 fisherman days per mile, per year on Miner Creek. This equals 50 fisherman days per year on the Encampment River and 17.5 fisherman days per year on Miner Creek within the WSA. These figures are probably low in light of the increased use of the Encampment River Trail since development of the trailhead. Approximately 16 percent of the visitor use on the trail is associated with fishing.

Over the past few years, kayakers and tubers have begun to use the river during spring runoff, as it provides an exciting float trip.

Hunting, especially for mule deer, is very popular within the WSA as, locally, it is considered a potential trophy area. Bighorn sheep hunting is limited by quota, but it is considered a premium area to hunt.

Other recreational use of the WSA includes ORV use (during nonrestricted periods), horseback riding, and sightseeing.

Recreational use away from the Encampment River Trail is estimated at 2,000 visitor days per year. About half of this involves the use of ORVs.

Wildlife Resources

The Encampment River Canyon WSA provides habitat for a wide variety of game and nongame wildlife. A list of these species is available at the Rawlins BLM District Office.

Portions of three big game herd units occur in the WSA. A variable number of animals from each herd use the WSA throughout the year.

The entire Encampment River Canyon WSA is part of a larger crucial winter range for bighorn sheep. The Encampment bighorn sheep herd has generated a great deal of interest recently because of its dramatic decrease in size. In 1976 and 1977, 68 bighorn sheep were introduced into the Encampment River Canyon. The population increased to approximately 135 by the fall of 1983. During the winter of 1983-1984 the population sustained a 25 percent loss because of the severe winter weather. From 1984 to 1986 the population decreased from 102 to 40-60 animals (Rudd 1986). WGFD reports indicate that the reduction may have been due to disease, competition from elk, mule deer, antelope, and cattle; and harassment by off-road vehicles.

Studies in different areas indicate that harassment by humans can play a significant role in such a reduction in bighorn sheep numbers, especially if the harassment occurs during the winter. The Encampment bighorn sheep herd has historically concentrated on crucial range in the WSA during the winter. Concern over the decline of the herd led to the authorization in 1986 of an emergency (temporary) ORV closure in the area from December 1 to April 30. The environmental assessment for the emergency closure (number WY-033-0213) contains a more detailed discussion of the effects of harassment on bighorn sheep. A copy may be obtained from the BLM's Rawlins District office.

Ewes from this herd also use a lambing area in the WSA, where steep, rocky slopes provide security from predators. Forage availability and quality of the crucial winter range is essential to the viability of the population.

The area is covered by a 1976 Habitat Management Plan (HMP) that is scheduled for revision. The annual coordination meeting in 1982 identified the need for better data collection

AFFECTED ENVIRONMENT

on herd dynamics by the WGFD and reliable estimates of range utilization and production by BLM and USFS.

Competition occurs among bighorn sheep, elk and cattle due to season-long use by wildlife and summer use by livestock (Haas 1979). Much of the generally more productive side slopes are unavailable to cattle (due to topography) and to wildlife (due to snow distribution patterns). As a result, use is concentrated on the generally less productive flat benches and the snow-free southwesterly exposures.

While deer and elk will disperse as much as possible to utilize high quality available forage in adjacent areas, sheep are habitual by nature. They tend to congregate in well-defined areas and utilize all available forage before they disperse to other areas. Cattle also tend to congregate in well-defined areas, and their concentrations compound the problem of competition for forage.

The WSA is also used throughout the year by mule deer. The northern half of the WSA encompasses a small portion of the crucial winter range required by the Platte Valley mule deer herd. Variable numbers of mule deer may be found yearlong throughout the WSA. Deer concentrate on the lower elevation crucial winter range (where forage availability is critical during winter) when summer range on the national forest is unavailable. Mule deer depend on the extensive aspen and riparian habitat sites for spring fawning.

In addition, the WSA is used by 90 to 150 elk from the WGFD's Baggs Herd Unit. The northern half of the WSA is used by elk primarily during the winter months. The southern half is part of a much larger crucial winter-yearlong range considered to be essential to 10 to 15 percent of the Baggs elk herd (Moody 1985).

The WSA contains high-value aspen, mountain shrub, and riparian habitat sites used by up to 165 wildlife species. The aspen habitat sites are primarily scattered in small stands on slopes and exposures where snow concentrates and total about 140 acres. Aspen habitat is normally maintained by fire or other disturbances. In most areas of their occurrence within the WSA, aspen stands are rapidly being invaded by conifers because of a lack of fire or other disturbance. Much of the aspen is decadent and diseased and in need of habitat manipulation if it is to be maintained and/or improved.

Mountain shrub habitat sites are found throughout the WSA and compose a large portion of the nonforest vegetative community. These mountain shrub sites are important to wintering

big game by providing much of their wintering diet. They are presently in fair to poor condition and the potential exists to increase the quality and quantity of these sites for wildlife through prescribed burning and shrub plantings.

Riparian habitat sites are present along the banks of the Encampment River and tributary drainages in the WSA and total about 110 acres. Riparian sites are highly productive in terms of plant and animal species diversity, vegetation structure and biomass, and they are important to wildlife because of their limited availability. Within the WSA, some riparian areas are heavily utilized by livestock and wildlife. As a result, plant vigor has decreased and species composition has been changed such that the sites are not producing at their full potential.

Fisheries Resources

The Encampment River is a popular trout fishery, attracting local and out-of-state fishermen. Brown, rainbow, and brook trout occur in the Encampment River and Miner Creek, its tributary within the WSA. Catchable rainbows have been planted annually in the vicinity of the Independent Order of Odd Fellow's Lodge (IOOF) north of the WSA boundary. Trout have not been planted upstream from this point since 1952.

The WGFD's stream fisheries classification for the Encampment River is Class II (very good trout waters, fisheries are of statewide importance). Miner Creek is a Class IV stream (low production waters, fisheries are of local importance).

The Encampment River and Miner Creek provide a total of about 5.6 miles of habitat for populations of brown, rainbow, and brook trout within the WSA. The Encampment River runs through the WSA for about 2.5 miles from south to north, through a steep walled canyon. Miner Creek runs about 2.7 miles through the WSA and enters the Encampment River from the southwest at a point just south of the northern boundary of the WSA. The north fork and south fork of Miner Creek each run about 0.4 miles within the WSA.

Riparian vegetation along the river and creek includes willow, alder, and cottonwood. Habitat along Miner Creek, including spawning and rearing areas, was found to be in good condition according to habitat surveys conducted in 1985 by BLM. Small areas of livestock induced damage to the stream were noted. The Encampment River habitat also is in good condition with limited localized damage to the stream by cattle. The channel stability rating along the Encampment River is good.

AFFECTED ENVIRONMENT

A self-sustaining brown trout population is the predominant species in the Encampment River, although rainbow and brook trout occur. Electro-shocking studies by the WGFD (Kanaly 1977) have found up to 40 trout per 100 yard station (700 trout per mile) in the Encampment River upstream from the WSA. In the north fork of Miner Creek results indicated 58 trout (mostly brook trout) per 100 yard station (over 1,000 trout per mile).

Opportunities exist to improve the already good fisheries in the WSA through placement of boulders in the Encampment River and construction of pools in Miner Creek.

Nongame fish in the WSA include white and longnose suckers, and longnose dace. Creek chubs probably occur.

In summary, the Encampment River and Miner Creek within the WSA provide good habitat for populations of brown, rainbow, and brook trout. Fish habitat appears to be in good condition, populations are apparently self-sustaining, and spawning takes place in both streams.

Livestock Grazing

Four operators graze livestock (cattle) within the boundary of the Encampment River Canyon WSA. The cattle tend to concentrate along the river bottoms and associated riparian zones. The upper reaches of the WSA are accessible but tend to be lightly grazed due to the steepness of the canyon walls and lack of available water away

from the drainage bottoms. There are four grazing allotments in the area that are made up in part by lands in the Encampment River Canyon WSA.

Only one fence exists within the WSA. This fence, which partially separates two allotments, does little to control drift of cattle. Due to the lack of effective barriers, cattle congregate and spend the majority of the grazing season (May through October) in the same localized areas. Utilization within the WSA, as a result of this concentrated use, varies considerably between the riparian zones and the side slopes and ridges. The operators place supplemental salt along the ridges and upper reaches of the WSA in an attempt to better distribute grazing use.

Cattle within the WSA compete for forage with elk, deer, and bighorn sheep. Due to a lack of available data, it is unclear how this competition has affected the overall availability of forage. Recent utilization checks of the area have shown utilization levels within the riparian areas as high as 80 percent in some areas.

Herding and checking of cattle is done by horseback and four-wheel drive vehicle on the existing two-track trails in the WSA. Conflicts exist between cattle and people using the Encampment River Trail for recreation (see "Recreation Resources").

Table 3 lists and describes the grazing allotments, including a breakdown of federal acres and animal unit months in the WSA, and in the allotments as a whole.

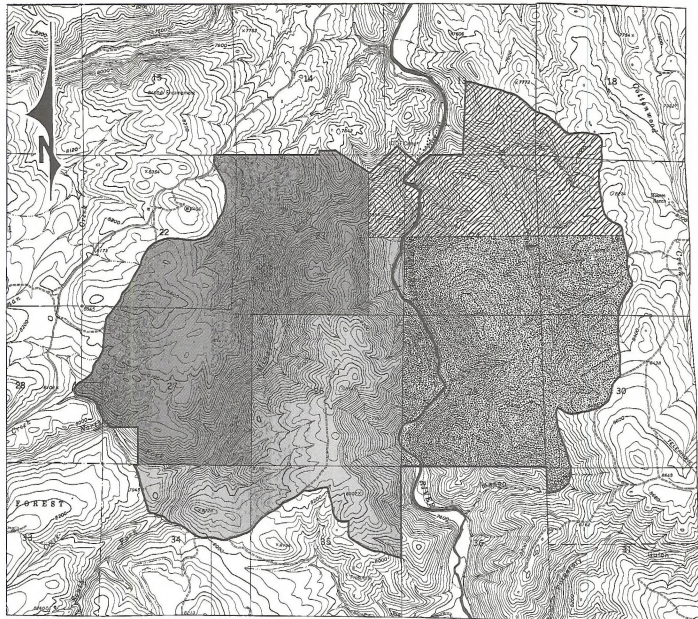
Map 3 shows the four allotments as they lie within the WSA boundary.

TABLE 3
LIVESTOCK GRAZING ALLOTMENTS IN THE ENCAMPMENT RIVER CANYON WSA

No.	Allotment Name	Season of Use	Kind of Livestock	Total Federal Acres	No. of Federal Acres in WSA	Percent of Federal Acres in WSA	Total Federal AUMs	No. of Federal AUMs in WSA	Percent of Federal AUMs in WSA
1008	Finch Ranch	Spring-Summer	Cattle	1,919	1,101	57	138	79	57
1010	Herring	Summer	Cattle	1,898	1,425	75	165	124	75
1029	Saulcy	Summer	Cattle	3,172	1,236	39	291	113	39
1017	Cottonwood	Summer-Fall	Cattle	1,966	767	39	220	86	39

R 84 W

R 83 W

T
14
N

GRAZING ALLOTMENTS:

 1008 Finch Ranch

 1010 Herring

 1017 Cottonwood

 1029 Saulcy

 Encampment River Canyon WSA Boundary


Map 3
LIVESTOCK GRAZING ALLOTMENTS IN
THE ENCAMPMENT RIVER CANYON WSA
Medicine Bow Wilderness Supplement

AFFECTED ENVIRONMENT

Mineral Resources

Geologic Setting

The Encampment study area is part of the Sierra Madre Range. The Sierra Madre Range is a northwest trending anticlinal uplift of Precambrian rocks near the Colorado-Wyoming border. A shear zone divides the Sierra Madre Range into a complex of Archean granite and feldspathic gneisses north of this shear, with banded schists and gneisses of Proterozoic age south of the shear. The shear zone appears to be an extension of the Mullen Creek Nash Fork Shear Zone of the Medicine Bow Mountains, which divides the Medicine Bow Range into an older Archean province in the north and a younger, Proterozoic province to the south. The older, northern province has been interpreted as Archean protocontinent with the shear and southern province representing a Precambrian continental margin. The Encampment River Canyon study area lies north of the shear in the Archean protocontinent province. The oldest unit in the Sierra Madre Range is a well foliated, medium grained quartz biotite gneiss (Divis 1976). This unit is also the predominant rock type in the area. The quartz biotite gneiss is intruded by numerous mafic and pegmatitic sills and dikes. Two Kyanite bearing pegmatites were located in Section 20, T. 14 N., R. 84 W.

Oil and Gas

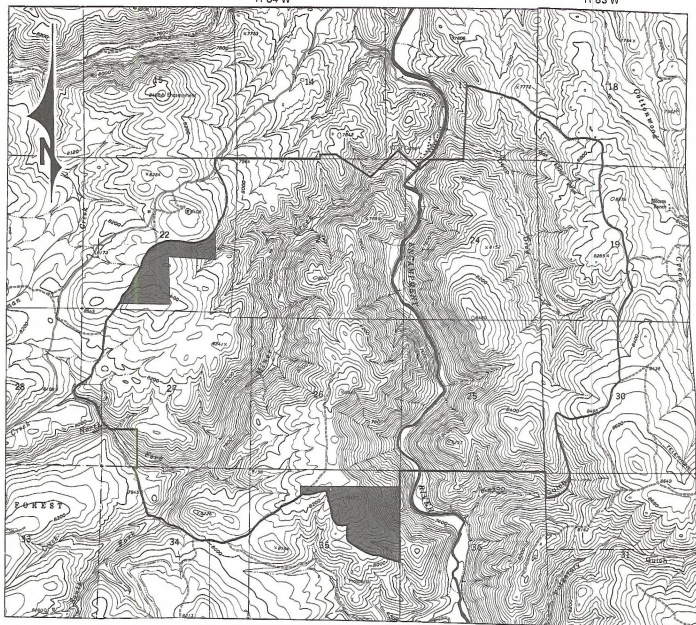
There are no existing oil and gas leases within the WSA. Due to the geologic environment, which has no to low potential for oil and gas accumulation, the difficulty of access, and the difficulty of conducting drilling operations in these types of geologic conditions, oil and gas exploration and development is not anticipated in the WSA.

Locatable Minerals

Based on a field examination of the Encampment River Canyon WSA and adjacent areas, the Mullen Creek Nash Fork shear zone and associated shears appear to control mineralization in the general area, with the major shears trending south of the area. The WSA is located north of the Mullen Creek-Nash Fork shear zone in older Archean rocks. There are numerous prospect pits, shafts, and unnamed underground mines within the WSA. There was no known shipment of ore from any of the mines. There are 17 post-FLPMA mining claims within or partially within the WSA (see map 4). The claims are located for copper, gold and silver. An expression of interest was submitted by a private company indicating the area has a high potential for copper, rare earths, lead, gold, and silver. However, due to an unfavorable economic outlook, the geology of the WSA, and the historical lack of ore shipments, development of the claims is not expected.

R 84 W

R 83 W



T 14 N



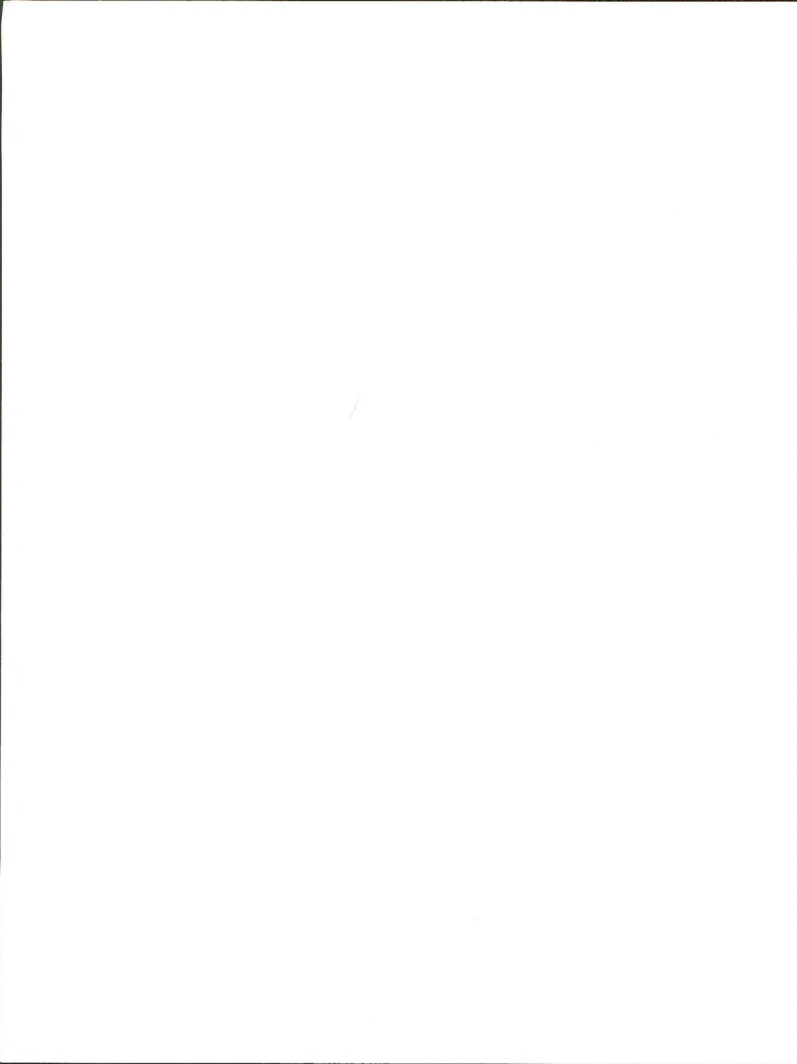
SCALE IN MILES

— Encampment River Canyon WSA Boundary

■ Post-FLPMA Mining Claims



Map 4
POST-FLPMA MINING CLAIMS IN THE
ENCAMPMENT RIVER CANYON WSA
Medicine Bow Wilderness Supplement



PART I
ENCAMPMENT RIVER CANYON WSA

Chapter Four

Environmental Consequences

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PART I - ENCAMPMENT RIVER CANYON WSA (WY-030-301)

CHAPTER 4 - ENVIRONMENTAL CONSEQUENCES

Proposed Action - No Action: No Wilderness

Effects on Wilderness Values

Continuation of the ORV closure on the Encampment River Trail and the WSA-wide winter ORV closure would enhance opportunities for solitude and primitive recreation during the restricted period. During the nonrestricted period, ORV use in the WSA would impair solitude slightly.

Construction of livestock exclosures around potential campsites, placement of boulders and construction of pools to enhance fisheries, vegetation manipulation for wildlife habitat enhancement, and construction of range improvement projects decrease solitude during implementation. Once completed, these developments would decrease naturalness slightly because of the presence of human influences that would be noticeable to visitors.

The livestock exclosures would enhance primitive recreation opportunities from the standpoint that potential campsite areas would have improved vegetation cover and would be free of cattle manure.

Expected locatable mineral exploration would be small-scale and would not materially affect wilderness values.

Conclusion: Under this alternative, the wilderness values of solitude and naturalness would be slightly impaired by continued ORV use and implementation of developments for recreation, wildlife, fisheries, and livestock grazing management. Opportunities for primitive recreation would be enhanced by construction of livestock exclosures along the Encampment River Trail.

Effects on Recreational Opportunities

Under this alternative, all forms of recreation would remain basically unchanged. Activities would include those of a primitive nature such as hunting, fishing, hiking, camping, and sight-seeing.

Construction of livestock exclosures would enhance recreational opportunities from the standpoint that potential campsite areas would have improved vegetation cover and would be free of cattle manure.

Placement of boulders and construction of pools to enhance fisheries would lead to enhanced fish production and better fishing. Vegetation manipulation for wildlife habitat enhancement would slightly enhance the opportunity to view or hunt big game in the WSA.

Projected range improvement projects would have no material effect on recreational opportunities in the WSA. They could reduce conflicts with cattle through better grazing distribution.

Mineral exploration would be small-scale and would have no material effect on recreation.

Conclusion: Types of recreational activities would remain unchanged and would be enhanced through elimination of cattle use in the camping areas along the trail and improved fishing and hunting opportunities.

Effects on Wildlife and Fisheries

The winter ORV closure would continue to reduce harassment due to snowmobile use on crucial big game winter ranges. As a result there would be less stress and displacement of big game.

On the Encampment River, boulder placement in more heavily fished sections would increase usable habitat and numbers of trout in these areas. On Miner Creek, spawning and year-round habitat would be modified with in-stream structures, thereby improving wild trout recruitment to the Encampment River and numbers of trout using the creek year-round.

ENVIRONMENTAL CONSEQUENCES

Construction of livestock enclosures around potential campsites along the Encampment River would result in the improvement of about 50 acres of riparian habitat along about one-half mile of stream bank. This would benefit fisheries and wildlife species that utilize riparian habitats.

Treatment of 200 acres of mountain shrub/ aspen habitats and establishment of mountain shrubs on an additional 200 acres would improve the quality of crucial winter habitat for bighorn sheep, elk, and mule deer. The quality and quantity of big game forage would increase. This would enhance the viability of the Encampment bighorn sheep herd and the elk and mule deer that use the area.

Livestock grazing management would include monitoring to determine whether adjustments are needed. If studies show that additional forage is needed for wildlife, adjustments in livestock use would be made, which would improve wildlife forage availability.

Projected range improvement projects would not materially affect wildlife since they would be designed to consider wildlife values.

Expected locatable mineral exploration would be small-scale and would not materially affect wildlife or wildlife habitat.

Conclusion: Stress and displacement of big game would be reduced as a result of the winter ORV closure. Usable trout habitat and numbers of trout would increase in the Encampment River and Miner Creek as a result of fisheries management actions. About 50 acres of riparian habitat along about one half mile of stream bank would be improved as a result of construction of livestock enclosures along the Encampment River. The quality and quantity of big game forage would increase as a result of vegetation manipulation on crucial winter range.

Effects on Livestock Grazing

No change in livestock use is proposed under this alternative. Existing data are insufficient to predict how future vegetation changes if any, would affect the availability of forage. Adjustments to livestock use would be made in the future if monitoring identified a need.

Some areas would be lost to livestock use as a result of livestock enclosures around potential campsites. The loss of forage available to livestock would be negligible since such a small area would be involved. Livestock movement

along the trail would not be restricted since livestock could move freely around the enclosures.

Projected allotment boundary fences would improve distribution patterns and eliminate uncontrolled drift of cattle between allotments. New spring developments would improve distribution and provide additional sources of water for cattle. Consideration of scenic, wildlife and recreation values in the design and construction of range improvement projects would cause greater implementation expense as compared to standard construction. This consideration would include use of let-down fences and location of projects to avoid visual intrusions.

Proposed vegetation manipulation to improve big game crucial winter range would not improve forage availability for livestock to any great extent.

Conclusion: Adjustments to livestock use would be made in the future if monitoring identified a need. The loss of forage available to livestock as a result of livestock enclosures around potential campsites would be negligible. Projected range improvement projects would improve distribution patterns, eliminate uncontrolled drift of cattle between allotments, and provide additional sources of water for cattle. Consideration of scenic, wildlife and recreational values in the design and construction of range improvement projects would raise their costs compared to standard construction. Proposed vegetation manipulation to improve big game crucial winter range would not improve forage availability for livestock to any great extent.

Effects on Mineral Exploration and Development

Oil and gas leases would be issued subject to appropriate standard surface disturbance stipulations. There would be no impact on oil and gas exploration and development within the WSA.

Locatable mineral exploration activity would be regulated by the 1872 Mining Law and the 43 CFR 3809 regulations. ORV restrictions would not significantly affect mining activities since they would not preclude access to mining claims for assessment or exploration. There would be no impact to exploration and development of existing or future claims under this alternative.

Conclusion: There would be no effect on exploration and development of oil and gas or locatable minerals.

ENVIRONMENTAL CONSEQUENCES

All Wilderness Alternative

Effects on Wilderness Values

Under this alternative the Encampment River Canyon WSA would be recommended suitable for wilderness designation. Upon designation, the area would be managed according to the guidelines of BLM's wilderness management policy. Activities that would impair the wilderness character of the area would be restricted. This would help ensure the long-term protection of the wilderness values of naturalness, opportunities for solitude, and opportunities for primitive and unconfined recreation. It would also help ensure the preservation of the scenic quality of the area.

Closing the area to ORV use would enhance opportunities for solitude and primitive recreation during the entire year. Currently the area is closed to ORVs only in the winter.

Projected range improvement projects would decrease solitude during implementation, but would not impair wilderness values in the long term since they would be designed to comply with the wilderness management policy.

Expected locatable mineral exploration would be small-scale and would not materially affect wilderness values.

Conclusion: Under this alternative the wilderness values of naturalness, opportunities for solitude, and opportunities for primitive and unconfined recreation would be protected in the Encampment River Canyon WSA. The scenic quality of the area would be preserved. Closing the area to ORV use would enhance opportunities for solitude and primitive recreation all year long. Other actions would not greatly affect wilderness values.

Effects on Recreational Opportunities

Recreational use of the Encampment River Trail would be largely unaffected. Activities would include those of a primitive nature such as hunting, fishing, hiking, camping, and sight-seeing. Trail use is projected to level off at about 6,000 visitor days within the next five years.

Under this alternative, motorized forms of recreation would be prohibited. This would displace approximately half of the use that currently occurs away from the Encampment River Trail; about 1,000 visitor days associated with ORV use. Within five years, nonmotorized recreational use would increase and the total use

would level off at about 1,500 visitor days in the area away from the trail. This is approximately 500 visitor days fewer than is projected under current management.

The ORV use displaced from the WSA could easily be shifted to other areas with virtually no effect on opportunities for motorized recreation in the region.

Under this alternative there would be no increase in usable habitat and numbers of trout in the Encampment River and Miner Creek. As a result, the number or size of trout creel from the Encampment River might need to be regulated in the future if fishing pressure and trout harvest resulted in a threat to the viability of the wild trout populations or a reduction in angler success rates.

Conflicts between cattle and recreationists from concentrated use along the trail would remain. Some potential campsites would still have reduced vegetation and concentrations of cattle manure, because cattle would continue to use them for loafing areas.

Projected range improvement projects would have only minor effects on recreational opportunities in the WSA. They could reduce conflicts with cattle through better grazing distribution.

Mineral exploration would be small-scale and would have no material effect on recreation.

Conclusion: Recreational use of the Encampment River Trail would be largely unaffected. About 1,000 visitor days associated with ORV use would be displaced. The ORV use displaced from the WSA could easily be shifted to other areas with virtually no effect on opportunities for motorized recreation in the region. Within five years total recreational use would level off at about 500 fewer visitor days than are projected under current management. There would be no increase in usable habitat and numbers of trout, and the number or size of trout creel from the Encampment River might need to be regulated in the future. Conflicts between cattle and recreationists from concentrated use along the trail would remain.

Effects on Wildlife and Fisheries

The ORV closure would benefit big game by reducing harassment due to snowmobile use on crucial big game winter ranges. It also would reduce big game encounters with ORVs within the WSA through the remainder of the year. As a result, there would be less stress and displacement of wildlife. Currently the area is closed to ORVs only in the winter.

ENVIRONMENTAL CONSEQUENCES

Under this alternative, actions would be undertaken to improve wildlife habitat if problems were found during monitoring. Since any action taken would have to be consistent with BLM's Wilderness Management Policy, certain actions such as the alteration of vegetation using motorized equipment would be prohibited. Thus, the range of available techniques for improving wildlife habitat in the WSA would be somewhat limited. However, the policy is sufficiently flexible to allow for habitat rehabilitation when clearly needed, so the quality of big game habitat and its ability to support animals would not be reduced under this alternative.

Since no actions to enhance fisheries are proposed, there would be no increase in usable habitat and numbers of trout in the Encampment River and Miner Creek.

Livestock grazing management would include monitoring to determine whether adjustments are needed. Adjustments in livestock use would be made if monitoring indicates a need. This could help improve wildlife habitat conditions.

Projected range improvement projects would not materially affect wildlife since they would be designed to consider wildlife values.

Expected locatable mineral exploration would be small-scale and would not materially affect wildlife or wildlife habitat.

Conclusion: Stress and displacement of big game would be reduced year round as a result of the ORV closure. Usable trout habitat and numbers of trout would not increase in the Encampment River and Miner Creek since fisheries improvement actions are not proposed. The quality of big game habitat and its ability to support animals would not be reduced by the constraints on wildlife habitat improvement techniques imposed by BLM's Wilderness Management Policy.

Effects on Livestock Grazing

No change in livestock use is proposed under this alternative. Existing data are insufficient to predict how future vegetation changes if any, would affect the availability of forage. Adjustments to livestock use would be made in the future if monitoring identified a need.

Compliance with BLM's Wilderness Management Policy would affect livestock grazing management in the WSA. In general, motor vehicle access would be allowed only in emergency situations and occasionally to maintain range improvements. Routine man-

agement activities such as herding, checking cattle, or placing salt blocks would be more expensive and labor intensive as a result of motor vehicle restrictions.

Projected allotment boundary fences would improve distribution patterns and eliminate uncontrolled drift of cattle between allotments. New spring developments would improve distribution and provide additional sources of water for cattle. Compliance with the wilderness management policy would cause higher construction expenses as compared to standard construction. The increased construction costs would be the result of using let-down fences, locating projects to avoid visual intrusions and restricting the use of motorized equipment.

Conclusion: Adjustments to livestock use would be made in the future if monitoring identified a need. Compliance with BLM's Wilderness Management Policy would make routine management activities such as herding, checking cattle, or placing salt blocks more expensive and labor intensive as a result of motor vehicle restrictions. It also would make accomplishment of new range improvement projects more expensive and labor intensive. Projected range improvement projects would improve distribution patterns, eliminate uncontrolled drift of cattle between allotments, and provide additional sources of water for cattle.

Effects on Mineral Exploration and Development

No new leasing would be allowed, so the availability of currently unrecognized oil and gas reserves would be forgone. However, since oil and gas potential for the Encampment WSA is believed to be low to none and no development is projected, this effect is considered to be minor.

No new mining claims would be allowed, so the availability of currently unrecognized mineral deposits would be forgone. There are 17 post-FLPMA mining claims within or partially within the WSA. Activity on these existing claims or on any claims staked prior to wilderness designation would be subject to the nonimpairment criteria. Upon designation, the area would be closed to new mineral entry, and validity examinations would be done on existing claims. The area would be unavailable for further exploration except for certain nonimpairing resource surveys. Wilderness designation would make exploration for and development of possible mineralized zones in the WSA very difficult due to restrictions on vehicles and equipment. The effect would basically be one of

ENVIRONMENTAL CONSEQUENCES

added expense and labor to meet BLM wilderness management policy requirements of prevention of undue or unnecessary degradation of wilderness character. Motorized equipment could be used and impairing activities could be carried out only if absolutely necessary for development of claims. Reclamation measures would be required to restore the surface of disturbed land as near to its former state as practicable after mining. These requirements would not prevent development of any of the existing claims.

Conclusion: The availability of currently unrecognized oil and gas reserves would be forgone. Due to low potential for development the effect on oil and gas exploration and development would be minor. No new mining claims would be allowed, so the availability of currently unrecognized mineral deposits would be forgone. The requirements of BLM wilderness management policy would not prevent development of any of the existing claims, but would make development more expensive and labor intensive.



PART II
PROSPECT MOUNTAIN WSA

Chapter Two

Alternatives

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PART II - PROSPECT MOUNTAIN WSA (WY-030-303)

CHAPTER 2 - ALTERNATIVES

Introduction

Since the pattern of future actions within the WSA cannot be predicted with certainty, assumptions were made to allow for the analysis of impacts under the alternatives. These assumptions are the basis of the impacts identified in this EIS. They are not management plans or proposals, but represent feasible patterns of activities that could occur under the alternatives analyzed.

Alternatives Eliminated from Detailed Study

An alternative to designate only part of the WSA as wilderness was considered. Partial wilderness designation would eliminate that area containing mining claims to avoid potential conflicts with other resource values. However, it was determined that the WSA is too small to make any reductions. Also, there are no logical boundaries for partial wilderness.

An alternative to enhance wilderness in the WSA by closing boundary roads and adding additional acreage was considered. However, there is no feasible way to do this. The area outside of the WSA does not have the wilderness characteristic of naturalness because of existing intrusions which include old mine pits, roads and fences.

Alternatives Considered in Detail

Two alternatives were analyzed for the Prospect Mountain WSA: (1) All Wilderness (the Proposed Action) and (2) No Action: No Wilderness. Descriptions of the management direction for the alternatives follow.

Proposed Action - All Wilderness

Under this alternative, the Prospect Mountain WSA (1,145 acres) would be recommended as suitable for designation as wilderness. Management of the area would be guided by BLM's Wilderness Management Policy, issued September 24, 1981. Management would provide for protection and preservation of the area's natural conditions and wilderness character.

Management actions for recreation, wildlife and fisheries, livestock grazing and minerals would be constrained to ensure that wilderness values were not impaired.

Wilderness Management

The objective would be to protect and preserve the area's natural conditions and wilderness character.

Activities such as construction of facilities that would impair the wilderness character of the area, road building, the use of motorized equipment and vehicles, timber harvesting, and mining would be restricted or prohibited. Specific restrictions are included in the following discussions.

A wilderness management plan would be written for the area outlining specific management guidance. The plan would be written according to the guidelines in BLM's Wilderness Management Policy and BLM Manual Section 8561, Wilderness Management Plans, available at most BLM offices.

Recreation Management

The objective is to provide for primitive forms of recreation such as hunting, camping, wildlife viewing, and backpacking. *no recreation facilities are planned.*
The entire WSA would be closed to ORVs. A little more than 1 mile of jeep trails presently available for ORV use would be affected.

ALTERNATIVES

Recreational use in 1985 was estimated to be about 500 visitor days. This level of use is expected to remain constant in the future with nonmotorized forms of recreation replacing motorized recreation displaced by the ORV closure.

Wildlife Habitat Management

The objective would be to maintain or enhance habitat for elk and mule deer within the constraints of BLM's Wilderness Management Policy.

Big game habitat and populations in the WSA would be assessed and monitored to determine the condition of the habitat and the distribution and interaction of big game species. The extent of competition between cattle and big game would be determined for the area.

Actions would be undertaken if wildlife habitat problems were documented. For example, if crucial winter range were determined to be deteriorating, temporary fencing or change in season of use might be required, or the number of big game animals could be reduced in cooperation with the WGFD. Any action taken would be consistent with BLM's Wilderness Management Policy. Thus, certain actions such as the alteration of vegetation using motorized equipment would be restricted or prohibited.

Forest Management

Under this alternative, there would be no forest management actions and no harvest of forest products.

Minerals Management - Oil and Gas and Localities

No new oil and gas leasing would be allowed.

~~Until the WSA was designated wilderness by Congress, the existing 13 post-FLPMA mining claims would be subject to the interim management policy. This policy allows only activities that do not impair wilderness values. If a discovery were made using nonimpairing methods, then a claimant would be entitled to a patent on those claims. The area would continue to be open to mining location until designation as wilderness.~~

After the WSA was designated wilderness, the existing 13 post-FLPMA mining claims would be subject to BLM's Wilderness Management Policy.

No new mining claims would be allowed. Validity examinations would be required before allowing operations on claims. Mining development would be carried out in a manner that prevents unnecessary or undue degradation of wilderness character. ~~Small-scale development of several of the claims could be expected with each mine site exclusive of access roads disturbing less than five acres of the WSA.~~

*due to constraints of wild mgmt
no activities*
No Action: No Wilderness

Under this alternative, the Prospect Mountain WSA (1,145 acres) would be recommended as nonsuitable for designation as wilderness. The WSA would be managed for dispersed recreation, wildlife habitat, forest production, and mineral development.

Wilderness Management

The WSA would not be recommended for wilderness designation and would be subject to actions that would enhance dispersed recreation, wildlife habitat, forest production, and mineral development. No special emphasis would be placed on preservation of wilderness values.

Recreation Management

The objective is to provide for continuation of existing forms of recreation such as hunting, camping, wildlife viewing, and backpacking. ~~ORV use would be limited to existing roads and trails. A little more than 1 mile of jeep trails would remain available for ORV use.~~
recreation facilities are planned

Recreational use in 1985 was estimated to be about 500 visitor days. This is expected to remain constant in the future.

Wildlife Habitat Management

The objective would be to maintain or enhance habitat for elk and mule deer. *of Mtn. Shrub/Aspen of Mountain Shrub/Sagebrush areas*
Prescribed burning or cutting to increase perennial grass production and to stimulate important shrub communities would be accomplished on 200 acres of crucial elk winter range.

During severe winters the area would be closed to logging from December 1 to April 30. The area would be closed to logging May 10 to June 15 to protect calving elk.

ALTERNATIVES

Forest Management

Under this alternative the forest resource would be managed for the production of wood fiber within multiple-use constraints. Forest management activities would include commercial sawlog timber sales, corral pole and fence post sales, individual fuelwood sales, and precommercial thinning.

Approximately 300 acres would be harvested over the next 60 years through clearcuts ranging in size from about 10 to 25 acres. These clearcuts would be scattered throughout the area to eventually provide a mosaic of timber stands in

four different age classes. Approximately 2.5 million board feet would be harvested through four separate timber sales, 20 years apart. A harvest of 1 million board feet is recommended as soon as possible to control the current mountain pine beetle activity.

Potential harvest from the WSA is about 60,000 board feet per year of conifer on a sustained yield basis under intensive management. Small harvest volumes such as this are not feasible because of the economics of logging. Therefore, harvesting would take place periodically and would amount to larger volumes. The proposed schedule of harvest is detailed on table 4.

TABLE 4
Proposed Timber Sales in Prospect Mountain WSA

Year from Present	Estimated Volume (MMBF)	Acres of Harvest	Method of Logging	Miles of Road Upgrading	Miles of Temporary Road Construction
As soon as possible	1	75	Clearcut	1-1/4	1/2
20	1/2	75	Clearcut	0	1-1/4
40	1/2	75	Clearcut	0	1
60	1/2	75	Clearcut	0	3/4
Totals	2.5	300		1-1/4	3-1/2

Timber harvesting would be prohibited from December 1st to April 30th of each year. This restriction could be waived during mild winters. In this event, a multiple resource evaluation would take place, including consultation with the Wyoming Game and Fish Department, to determine severity of impacts on the wintering elk population.

Precommercial thinning would occur when the regenerated stands are about 25 years old. Another harvest of the stand through clearcutting would occur when the stand reaches 100 years of age.

Minerals Management - Oil and Gas and Localities

New oil and gas leases would be issued subject to standard protection requirements for sur-

face-disturbing activities (available from any BLM office in Wyoming). No drilling is expected, because of the low potential for oil and gas accumulation and the difficulty of access.

The existing 13 post-FLPMA mining claims would be managed subject to the Surface Management Regulation of 43 CFR 3809 governing surface management of public lands under U. S. mining laws. New mining claims would be allowed and would be managed the same as existing claims. Staking of additional mining claims would be anticipated. Some minor exploratory activity would be anticipated within the WSA boundary. ~~Small-scale~~ development of several of the claims could be expected over the long term with each mine site exclusive of access roads disturbing less than five acres of the WSA.

Acres disturbed would depend on number of claims developed simultaneously and amount/type of ore discovered if any

TABLE 5
SUMMARY OF IMPACTS
Prospect Mountain WSA

Issues	Proposed Action All Wilderness	No Wilderness
Effects on Wilderness Values	Naturalness, opportunities for solitude, and opportunities for primitive and unconfined recreation would be protected in the Prospect Mountain WSA. The scenic quality of the area would be preserved. Designation would expand an area where wilderness values are afforded protection, because of the proximity to the Platte River Wilderness. Closing the area to ORV use would enhance opportunities for solitude and primitive recreation. Expected locatable mineral exploration and development would degrade the wilderness values of solitude and naturalness. Reclamation requirements under the wilderness management policy would reduce the effect on naturalness to negligible levels in the long term.	Continued ORV use would degrade opportunities for solitude and primitive recreation somewhat. Forest management activities would degrade naturalness and opportunities for solitude. Expected locatable mineral exploration and development would degrade the wilderness values of solitude and naturalness. Reclamation requirements under BLM's surface management regulations would reduce the effect on naturalness in the long term.
Effects on Recreational Opportunities	Primitive recreational values and opportunities would be protected and enhanced somewhat under this alternative, because there would be no motorized vehicle traffic. Recreation use would remain at about 500 visitor days. Wilderness designation would preserve primitive recreation opportunities adjacent to the Platte River Wilderness.	Recreational use and values would change only slightly. Forest management and mineral exploration and development could displace recreationists during development or management activities.
Effects on Wildlife	Closing the area to ORV use would reduce big game encounters with ORVs within the WSA and associated stress and displacement of big game. Expected locatable mineral exploration and development would have virtually no effect on wildlife use or wildlife habitat.	Continued ORV use would not greatly affect big game. Prescribed burning or cutting would improve 200 acres of crucial elk winter range and high priority habitat types. Forest management would not greatly affect wildlife habitat and populations. Expected locatable mineral exploration and development would have virtually no effect on wildlife use or wildlife habitat.

TABLE 5 (Continued)
SUMMARY OF IMPACTS
Prospect Mountain WSA

Issues	Proposed Action All Wilderness	No Wilderness
Effects on Forest Resources and Forest Management	<p>Natural forest succession would continue with eventual conversion of the lodgepole pine stands to Engelmann spruce and subalpine fir. Fire hazard would increase. The productivity and health of the forest would be far less than optimal. Tree diversity, in terms of different species, sizes, and ages within any given stand would increase. Prohibiting timber harvest in the WSA would result in a loss of about 10 work years of potential employment and about \$737,000 in potential revenue generation in the near future and would make a potential winter logging area unavailable.</p>	<p>Timber harvesting would reduce fire hazard. The productivity and health of the forest would be enhanced by management activities. Tree diversity, in terms of different species, sizes, and ages within any given stand would be reduced in harvested areas, but increased in the unharvested areas. Timber harvest would contribute to the local economy for 1 or 2 years. A 1 million-board-foot timber sale in the near future would provide about 10 work years of employment and generate about \$737,000 of revenue in the local economy. Availability of winter logging areas would be increased.</p>
Effects on Mineral Exploration and Development	<p>The availability of currently unrecognized oil and gas reserves would be forgone. Due to low potential for development the effect on oil and gas exploration and development would be minor. No new mining claims would be allowed, so the availability of currently unrecognized mineral deposits would be forgone. The requirements of BLM wilderness management policy would not prevent development of any of the existing claims, but would make development more expensive and labor intensive.</p>	<p>There would be no effect on exploration and development of oil and gas or locatable minerals.</p>

PART II
PROSPECT MOUNTAIN WSA

Chapter Three

Affected Environment

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PART II - PROSPECT MOUNTAIN WSA (WY-030-303)

CHAPTER 3 - AFFECTED ENVIRONMENT

Introduction

There are many environmental components that would be unaffected by either of the alternatives for management of the Prospect Mountain WSA. Since they would not be affected, they are not described in detail in this chapter. These environmental components are covered briefly in the following paragraphs.

Many environmental components are not present in the WSA and therefore would not be affected. These include areas of critical environmental concern (ACEC), coal resources, nonenergy leasable minerals, floodplains, prime or unique farmlands, wetlands, wild horses, and wild or scenic rivers (designated or proposed).

Other environmental components are present in the WSA, but none of the management actions proposed would affect them. These include air quality, climate, cultural resources, livestock grazing, topography, water quality, and water yield.

No lands and realty actions are proposed or projected for the WSA, so none would be affected.

There are no permits for salable minerals in the WSA. Known deposits of sand and gravel occur but are segregated from sale by a previous management decision. Access to the Prospect Mountain WSA is limited and rough, and the area is about 3 miles from the nearest paved road, making it an unlikely source of salable materials. In addition, adequate sources of material are available outside the WSA along the highway right-of-way and in adjacent areas. Thus, availability of salable minerals would not be affected.

Restricting ORV use can potentially reduce soil erosion. However, in this WSA, ORV use is relatively light and is dispersed such that effects on soil erosion would be negligible.

Mining activities can increase erosion rates. However, soil erosion rates due to mining activities would be similar under either alternative. This is because mining would be managed under the surface management regulation of 43 CFR 3809, BLM's interim management policy, or BLM's wilderness management policy under either alternative to keep effects on soils to a minimum.

Timber harvesting activities can increase erosion rates. However, these actions would be implemented using standard mitigation measures that would minimize effects on soil erosion rates.

Threatened or endangered species would be unaffected by the management alternatives for the WSA. The Prospect Mountain WSA is within the range of the bald eagle, peregrine falcon, and black-footed ferret, which are protected by the Endangered Species Act (1964, as amended). However, no documented observations of these three species have been made in the WSA. Bald eagles may occasionally use the area during the winter for hunting. Peregrines are believed to migrate through the area in late fall and early spring. However, the WSA contains no breeding, nesting, or wintering habitat that would be essential to the recovery of either species. The area does not contain any prairie dogs, primary food of black-footed ferrets, so the existence of ferrets in the WSA is unlikely.

General Description

The Prospect Mountain WSA is located in southern Carbon County approximately 16 miles southeast of Encampment, Wyoming, and 8 miles north of the Colorado-Wyoming border, along the southwestern flank of the Snowy Range, Medicine Bow Mountains. Elevations range from 7,400 feet along the North Platte River to 8,430 feet on Prospect Mountain. The WSA is 70 percent forested (see photograph 3).

Access is provided by a primitive public road that originates 3 miles west of the WSA boundary on State Highway 230. During most of the winter, the WSA is inaccessible except by snowmobile.

AFFECTED ENVIRONMENT



Prospect Mountain WSA looking east from near the western border.

The Prospect Mountain WSA is adjacent to the U.S. Forest Service (USFS) Platte River Wilderness, which shares its eastern boundary.

Wilderness Values

Size

The Prospect Mountain WSA contains 1,145 acres of public land. No private or state inholdings and no split-estate lands are located within the WSA boundary.

Naturalness

Man's influence for the most part is unnoticeable. Except for one old dilapidated cabin and two short jeep trails that dead end, the area is free of intrusions. These intrusions blend into the overall view and are not noticeable from a distance. They do not impair the wilderness character of the WSA. The vegetation and/or topography screen the primitive trails, providing a high degree of naturalness.

Outstanding Opportunities for Solitude and/or a Primitive Unconfined Type of Recreation

The mountain and drainage, coupled with dense forest cover and riparian areas, provide a high degree of solitude, while creating numerous secluded places for recreational activities. With 70 percent of the area covered by trees, visitors are easily screened from one another. The Platte River Wilderness, which forms the eastern boundary of the WSA and contains 23,000 acres, enhances the opportunity for solitude in this WSA because of its undeveloped nature.

There are no developed recreational sites in or adjacent to the WSA. The road that forms a portion of the northern boundary of the WSA provides access to the North Platte River. This road, however, is accessible only via four-wheel drive vehicles.

The area offers opportunities for high-quality mule deer and elk hunting. It also offers hiking, camping, and rock hounding. The North Platte River offers high quality fishing and floatboating. Opportunities for sightseeing within the WSA are numerous as the area is exceptionally scenic, has

AFFECTED ENVIRONMENT

abundant wildlife such as raptors, small mammals and other nongame wildlife and is very photogenic.

Special Features

The Prospect Mountain WSA is highly scenic. Color and texture of the WSA contrast sharply with the adjacent high desert environment. Colors are many shades of green and blue in the warmer months and change to green, gold, and brown in the fall. The area has a Class II Visual Resource Management rating.

Recreational Resources

The Prospect Mountain area provides a variety of recreational activities, including fishing, hunting, sightseeing, hiking, camping, rock hounding, and wildlife viewing. The area is used by local residents and nonresidents alike. The North Platte River adjacent to the WSA offers high quality fishing and floatboating, and is a well-known national attraction.

There are no developed recreational sites in or adjacent to the WSA.

Public access to the area is available by vehicle, horseback, hiking, or boat. Estimated use is 500 visitor days per year.

About 20 special recreation use permits have been issued to area guides and outfitters who use the WSA in conjunction with adjacent areas for hunting operations and floatboating.

Floatboaters access the WSA by way of the Prospect Creek access point on the North Platte River. This put-in and take-out point is reached via the road that forms a portion of the northern boundary of the WSA. Use varies according to water flow and weather conditions. Many river users camp along the river within the WSA or adjacent to it while on overnight float trips down the river.

Other major recreational use is associated with mule deer and elk hunting. This area provides high-quality hunting and has regional significance.

Wildlife Resources

Elk from the Snowy Range elk herd may be found in the Prospect Mountain WSA year round. The northern half of the WSA is part of a large crucial winter range that is considered essential to the survival of the herd. The aspen and conifer

habitat types in the WSA provide elk with thermal and hiding cover. Forage is available in the aspen, riparian, and open sagebrush-grassland habitat types.

The WSA also provides yearlong habitat for variable numbers of mule deer from the extensive Platte Valley herd. More deer use the WSA during winter, when higher elevation habitat is made unavailable by deep snow. The extensive aspen and willow-riparian habitat sites on the WSA provide important fawning cover.

The aspen and willow-riparian habitat types on the WSA are used by up to 135 wildlife species. Aspen are found on both upland and riparian sites in the WSA. Aspen habitat is normally maintained by fire or other disturbances. In most areas of their occurrence within the WSA, stands are being rapidly invaded by conifers because of a lack of fire or other disturbance. About 30 percent of the WSA (320 acres) contains aspen in nonriparian areas.

Most of the riparian areas in the WSA are heavily utilized by livestock and wildlife and are not producing at their full potential. Riparian sites are highly productive in terms of plant and animal species diversity, vegetation structure, and biomass, and they are important to wildlife because of their limited availability. About 3 percent of the WSA (32 acres) contains riparian habitat.

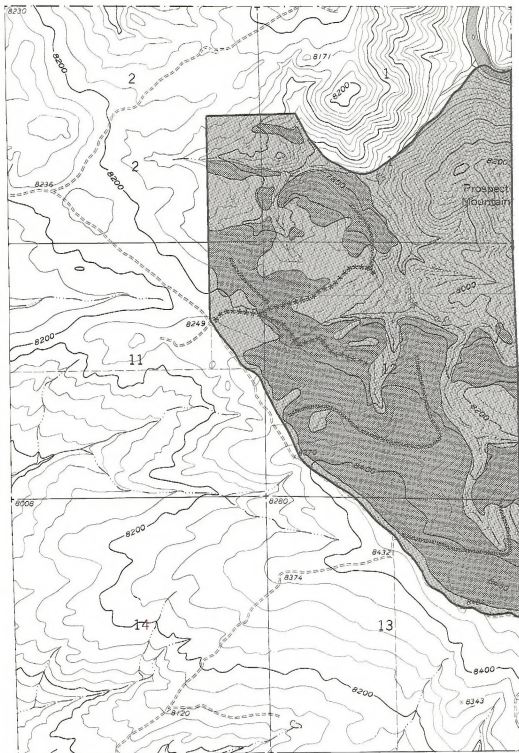
Forest Resources

Prospect Mountain WSA contains about 450 acres of commercial forestland, primarily mature lodgepole pine. More than two-thirds of the forested land is suitable for timber harvesting without special logging techniques (see map 5). The remaining acreage has limited harvesting opportunity because of poor accessibility, streamside protection corridors, and a visual buffer along the North Platte River.

The lodgepole pine is in several different even-aged stands that vary in age between 80 and 130 years. An understory of subalpine fir and Engelmann spruce is scattered throughout these stands. If left unmanaged the pine would eventually die because of insects and disease, and would be replaced by the subalpine fir and Engelmann spruce through natural succession.

The lodgepole pine is located on what is considered a good site (site index is 40 on a 50-year base) and has the potential, under intensive management, of producing 20,000 board feet per acre on a 100-year rotation. However, the current situation is a result of no

R 81 W



T
13
N



- Prospect Mountain WSA Boundary
- Area Suitable for Forest Management
- ▨ Area Unsuitable for Forest Management
- ***** Planned Two-track Upgrading
- +—+—+ Planned Temporary Road Construction



Map 5
**FOREST MANAGEMENT IN THE
PROSPECT MOUNTAIN WSA**
Medicine Bow Wilderness Supplement

AFFECTED ENVIRONMENT

past management. Current volumes range from 3,000 to 9,000 board feet per acre. The number of trees per acre varies from under 100 to over 1,000.

Mountain pine beetle activity is currently confined to about six small pockets of infestation. A risk rating system was applied to the sawtimber-sized lodgepole pine stands in the WSA to determine their susceptibility to major mountain pine beetle infestations. The risk rating system used incorporates climatic suitability (specifically latitude and elevation), tree age and tree size (Cole and Amman 1980). The results of this procedure indicate that a major outbreak is anticipated because of the elevation of the WSA (8,300 feet), an average diameter breast height of around 9 inches, and an average age of over 80 years. Mortality could reach one-half million board feet (over 5,000 trees) within the next 5 to 10 years.

The potential harvest from the WSA is about 60,000 board feet per year of conifer on a sustained yield basis under intensive management.

Demand for wood products exists from the sawmills located in Encampment and Saratoga. Over a period of 10 years or longer the potential wood supply from this WSA is insignificant toward meeting the needs of these mills. However, the wood that could be harvested becomes more important toward meeting their needs in a given year; particularly since this WSA has good winter logging potential, which is highly desirable for this region.

Other forest product sales are relatively minor and include fuelwood cutting, corral pole cutting, and Christmas tree cutting. These types of sales result from individual requests from the public.

Mineral Resources

Geologic Setting

The Prospect Mountain WSA contains rocks of Precambrian age. A pink, medium-to-coarse-grained granite and a foliated quartz monzonite are found in the southern half of sections 1 and 2 and the northern half of section 12, T. 13 N., R.

81 W. The northern half of Sections 1 and 2 consist of mafic igneous rocks ranging from orthoamphibolite to faintly foliated rocks with well developed igneous textures to massive, little altered igneous rocks. The degree of metamorphism is variable within the unit. Sections 2, 11, 12 and 13, T. 13 N., R. 81 W. also contain a complex unit made up chiefly of hornblende gneiss, but including biotite gneiss, sillimonite gneiss, and quartz-feldspathic gneiss. Diopside-hornblende-calcite gneiss, impure marble, calcite-garnet-epidote gneiss, amphibolite and calc-biotite gneiss also occur. Pink to white granite pegmatites, chiefly potassium feldspar, and quartz, mostly unzoned, are found throughout the area.

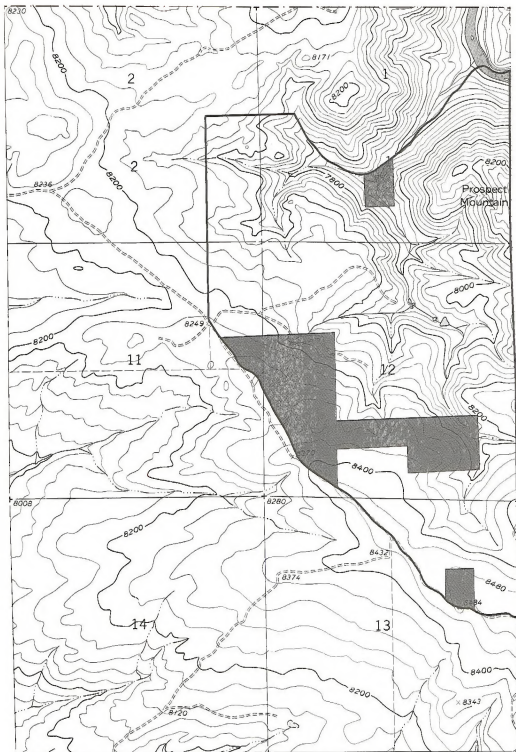
Oil and Gas

There are no existing oil and gas leases within the WSA. Due to the geologic environment, which is not favorable for oil and gas accumulation, the difficulty of access, and the difficulty of conducting drilling operations in these types of geologic conditions, oil and gas exploration and development is not anticipated in the WSA.

Locatable Minerals

There have been several producing mines within 2.5 miles of the Prospect Mountain WSA. Copper, uranium, gold, and rare earth minerals reportedly were shipped from the mines as recently as the late 1950s. The pegmatites scattered throughout the area appear to contain the important mineralization as all the known mines were located on pegmatite bodies. Several pegmatites are reported to occur within the area. An abandoned mine lying 200 yards outside of the WSA boundary has magnetic minerals and what appears to be a possible nickel bloom. A traverse of Prospect Mountain in 1981 showed the presence of scattered magnetic minerals and several prospect pits. Based on this information, it is likely that further exploration work would occur in the area, with the possibility of small-scale mine development. Thirteen post-FLPMA mining claims are located in the WSA (see map 6). These claims are located for various minerals including copper, uranium and feldspar.

R 81 W



T 13 N



— Prospect Mountain WSA Boundary
■ Post-FLPMA Mining Claims



Map 6
POST-FLPMA MINING CLAIMS IN
THE PROSPECT MOUNTAIN WSA
Medicine Bow Wilderness Supplement

PART II
PROSPECT MOUNTAIN WSA

Chapter Four

Environmental Consequences

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PART II - PROSPECT MOUNTAIN WSA (WY-030-303)

CHAPTER 4 - ENVIRONMENTAL CONSEQUENCES

Proposed Action - All Wilderness

Effects on Wilderness Values

Under this alternative the Prospect Mountain WSA would be recommended suitable for wilderness designation. Upon designation, the area would be managed according to the guidelines of BLM's wilderness management policy. Activities that would impair the wilderness character of the area would be restricted. This would help ensure the long-term protection of the wilderness values of naturalness, opportunities for solitude, and opportunities for primitive and unconfined recreation. It would also help ensure the preservation of the scenic quality of the area. Designation would essentially expand an area where wilderness values are already afforded protection since the WSA is adjacent to the Platte River Wilderness.

Closing the area to ORV use would enhance opportunities for solitude and primitive recreation.

Expected locatable mineral exploration and development would be small-scale. Although development of several claims would disturb less than five acres each and would be in compliance with BLM's wilderness management policy, they would degrade the wilderness values of solitude and naturalness during development activities. Access roads would degrade naturalness over a larger area. Reclamation requirements under the wilderness management policy would reduce the effect on naturalness to negligible levels in the long term.

Conclusion: Under this alternative the wilderness values of naturalness, opportunities for solitude, and opportunities for primitive and unconfined recreation would be protected in the Prospect Mountain WSA. The scenic quality of the area would be preserved. Designation would expand an area where wilderness values are afforded protection, because of the proximity to

the Platte River Wilderness. Closing the area to ORV use would enhance opportunities for solitude and primitive recreation. Expected locatable mineral exploration and development would degrade the wilderness values of solitude and naturalness. Reclamation requirements under the wilderness management policy would reduce the effect on naturalness to negligible levels in the long term. Other actions would not greatly affect wilderness values.

Effects on Recreational Opportunities

Primitive recreation values and opportunities would be protected and enhanced under this alternative, because there would be no motorized vehicle traffic.

Motorized forms of recreation would be prohibited. Motorized recreation is a minor use of the area and is mostly associated with other activities such as hunting or sightseeing. ORV use displaced from the area could easily be shifted to other areas with virtually no effect on opportunities for motorized recreation in the region.

Recreation use would remain at about 500 visitor days. Recreational activities currently associated with ORV use such as hunting or sightseeing would continue without the use of motor vehicles. The WSA is small enough that recreationists could easily walk from the boundary road into the area for the activities.

Wilderness designation would preserve primitive recreational opportunities adjacent to the Platte River Wilderness.

Designation of wilderness would not affect floatboaters' access to the Prospect Creek access point on the North Platte River. The boundary road would remain open to motor vehicle traffic.

Conclusion: Primitive recreational values and opportunities would be protected and enhanced under this alternative, because there would be no motorized vehicle traffic. ORV use displaced from the area could easily be shifted to other areas with virtually no effect on opportunities for motorized recreation in the region. Recreation use would remain at about 500 visitor days. Wilderness designation would preserve primitive recreation opportunities adjacent to the Platte River Wilderness. Floatboaters' access to the Prospect

ENVIRONMENTAL CONSEQUENCES

Creek access point on the North Platte River would not be affected.

Effects on Wildlife

Closing the area to ORV use would benefit big game by reducing big game encounters with ORVs within the WSA and associated stress and displacement of big game. This effect would be minor since ORV use in the area is low.

Under this alternative, actions would be undertaken to improve wildlife habitat if problems were detected through monitoring. Since any action taken would have to be consistent with BLM's Wilderness Management Policy certain actions such as the alteration of vegetation using motorized equipment would be prohibited. Thus, the range of available techniques for improving wildlife habitat in the WSA would be somewhat limited. However, the policy is sufficiently flexible to allow for habitat rehabilitation when clearly needed, so the quality of big game habitat and its ability to support animals would not be reduced under this alternative.

Expected locatable mineral exploration and development would be small-scale. Development of several claims would disturb wildlife slightly during development activities, however, there would be virtually no effect on wildlife use in the area or wildlife habitat over the long term.

Conclusion: Closing the area to ORV use would benefit big game by reducing big game encounters with ORVs within the WSA and associated stress and displacement of big game. The quality of big game habitat and its ability to support animals would not be reduced by the constraints on wildlife habitat improvement techniques imposed by BLM's Wilderness Management Policy. Expected locatable mineral exploration and development would have virtually no effect on wildlife use or wildlife habitat.

Effects on Forest Resources and Forest Management

There would be no forest management activities under this alternative. Natural forest succession would continue with eventual conversion of the lodgepole pine stands to Engelmann spruce and subalpine fir. Chance fire occurrence would be the only disturbance that would revert stands back to young lodgepole pine and aspen.

Increased mountain pine beetle activity would accelerate the decline of the lodgepole stands and consequently speed up the development of Engelmann spruce and subalpine fir stands. Lodgepole mortality caused by mountain pine beetle would increase fire hazard because of increased accumulations of dead wood. This would increase the chance of large wildfires in the long term.

Productivity of the forest in terms of useable wood fiber growth would remain far below its potential. Incidence of tree mortality due to naturally occurring insects and disease would remain high. The productivity and health of the forest would be far less than optimal from the stand point of wood fiber growth.

The gradual establishment of Engelmann spruce and subalpine fir would lead to an increase in tree diversity, in terms of different species, sizes, and ages within any given stand.

Wood products from the WSA would be unavailable to the sawmills located in Encampment and Saratoga. A 1 million-board-foot timber sale that is needed in the near future to control current mountain pine beetle activity would be forgone. The elimination of this planned sale would result in a loss of about 10 work-years of potential employment and about \$737,000 in potential revenue generation. Prohibiting timber harvest in the WSA would also mean that an area with winter logging potential would be unavailable for logging. This factor is locally important because the Platte Valley has limited opportunities for winter harvesting.

Over the next 60 years the amount of harvest forgone would be 2.5 million board feet. This amount is not very important to the local economy when considering the total timber harvest in the Platte Valley.

Conclusion: Natural forest succession would continue with eventual conversion of the lodgepole pine stands to Engelmann spruce and subalpine fir. Fire hazard would increase. The productivity and health of the forest would be far less than optimal. Tree diversity, in terms of different species, sizes, and ages within any given stand would increase. Prohibiting timber harvest in the WSA would result in a loss of about 10 work-years of potential employment and about \$737,000 in potential revenue generation in the near future and would make a potential winter logging area unavailable. Over the next 60 years the amount of harvest forgone would not be very important to the local economy.

ENVIRONMENTAL CONSEQUENCES

Effects on Mineral Exploration and Development

No new leasing would be allowed, so the availability of currently unrecognized oil and gas reserves would be foregone. However, since oil and gas potential for the Prospect Mountain WSA is low and no development is projected this effect is considered to be minor.

No new mining claims would be allowed, so the availability of currently unrecognized mineral deposits would be forgone. There are 13 post-FLPMA mining claims within or partially within the WSA. These claims are located for various minerals, including copper, uranium, and feldspar. Activity on these existing claims or on any claims staked prior to wilderness designation would be subject to the nonimpairment criteria. Upon designation, the area would be closed to new mineral entry, and validity examinations would be done on existing claims. The area would be unavailable for further exploration except for certain nonimpairing resource surveys. Wilderness designation would make exploration for and development of possible mineralized zones in the WSA very difficult due to restrictions on vehicles and equipment. The effect would basically be one of added expense and labor to meet BLM wilderness management policy requirements of prevention of undue or unnecessary degradation of wilderness character. Motorized equipment could be used and impairing activities could be carried out only if absolutely necessary for development of claims. Reclamation measures would be required to restore the surface of disturbed land as near as practicable after mining. These requirements would not prevent development of any of the existing claims.

Conclusion: The availability of currently unrecognized oil and gas reserves would be foregone. Due to low potential for development the effect on oil and gas exploration development would be minor. No new mining claims would be allowed, so the availability of currently unrecognized mineral deposits would be forgone. The requirements of BLM wilderness management policy would not prevent development of any of the existing claims, but would make development more expensive and labor intensive.

No Action: No Wilderness

Effects on Wilderness Values

Under this alternative the Prospect Mountain WSA would be recommended unsuitable for

wilderness designation. Wilderness values would be impaired by continued ORV use, forest management activities, and mineral exploration and development.

Continued ORV use would degrade opportunities for solitude and primitive recreation, but this effect would be minor because of the relatively small amount of ORV use in the area.

Forest management activities would impair the wilderness values of naturalness and opportunities for solitude. Harvesting of approximately 2.5 million board feet over the next 60 years would disturb solitude during harvesting operations. Precommercial thinning would also disturb solitude during operations. The roads and clearcuts would be obvious to visitors from many areas in the WSA and would degrade naturalness for many years following harvest.

Expected locatable mineral exploration and development would be small-scale. Although development of several claims would disturb less than five acres each at the mine sites and would be in compliance with BLM's surface management regulations (43 CFR 3809), they would degrade the wilderness values of solitude and naturalness during development activities. Access roads would degrade naturalness over a larger area. Reclamation requirements under BLM's surface management regulations would reduce the effect on naturalness in the long term.

Conclusion: Continued ORV use would degrade opportunities for solitude and primitive recreation. Forest management activities would degrade the wilderness values of naturalness and opportunities for solitude. Expected locatable mineral exploration and development would degrade the wilderness values of solitude and naturalness. Reclamation requirements under BLM's surface management regulations would reduce the effect on naturalness in the long term. Other actions would not greatly affect wilderness values.

Effects on Recreational Opportunities

Recreational use is not likely to change in the Prospect Mountain area and would remain at about 500 visitor days.

Forest management and mineral exploration and development could displace recreationists during development or management activities. Since deer and elk would be displaced during activity, hunters would be affected. However, these activities would be limited to specific areas and the effect would be relatively minor.

ENVIRONMENTAL CONSEQUENCES

Conclusion: Recreational use and values would change only slightly. Forest management and mineral exploration and development could displace recreationists during development or management activities.

Effects on Wildlife

ORV use would continue in the area, but use is low enough that effects on big game would be minimal.

Prescribed burning or cutting on 200 acres would enhance perennial grass production and stimulate important shrub communities. These actions would improve crucial elk winter range and high priority habitat types in the area.

Under this alternative, logging within the boundaries of the crucial elk winter range would occur during noncritical periods. Timber removed, as described in the alternatives, would neither benefit or adversely impact the crucial range. Disturbance of wintering and calving elk would be avoided by seasonal stipulations. There would be no significant effect on wildlife habitat and populations from forestry under this alternative.

Expected locatable mineral exploration and development would be small-scale. Development of several claims would disturb wildlife slightly during development activities, however, there would be virtually no effect on wildlife use in the area or on wildlife habitat over the long term.

Conclusion: Continued ORV use would not greatly affect big game. Prescribed burning or cutting would improve 200 acres of crucial elk winter range and high priority habitat types. Forest management would not greatly affect wildlife habitat and populations. Expected locatable mineral exploration and development would have virtually no effect on wildlife use or wildlife habitat.

Effects on Forest Resources and Forest Management

Forest management activities would occur under this alternative. These activities would include timber harvesting, along with associated road building, thinning, and fuelwood sales. Of the 450 acres of commercial forestland in the WSA, approximately 300 would receive intensive forest management.

Harvesting of lodgepole pine that is being attacked by mountain pine beetles would reduce fire hazard that would otherwise result from a buildup of dead wood.

Productivity of the forest in terms of useable wood fiber growth would be enhanced by timely removal of mature timber and the establishment of healthy regeneration. Incidence of tree mortality due to insect and disease activity would be reduced by forest management activities. The productivity and health of the forest would be enhanced from the standpoint of wood fiber growth.

Forest diversity within harvested areas would be reduced. Clearcuts would be regenerated with lodgepole pine that would be all the same age. In the unharvested areas the gradual establishment of Engelmann spruce and subalpine fir would lead to an increase in tree diversity, in terms of different species, sizes, and ages within any given stand.

Wood products from the WSA would be available to the sawmills located in Encampment and Saratoga. A 1 million-board-foot timber sale that is needed in the near future to control current mountain pine beetle activity would contribute to the local economy for 1 or 2 years. This sale would provide about 10 work years of employment and generate about \$737,000 of revenue in the local economy. The forest stands in the WSA are suitable for winter logging, and its availability for logging is locally important because the Platte Valley has limited opportunities for winter harvesting.

Over the next 60 years the amount of harvest from the WSA would be 2.5 million board feet. This amount is not very important to the local economy when considering the total timber harvest in the Platte Valley.

Conclusion: Timber harvesting would reduce fire hazard. The productivity and health of the forest would be enhanced by management activities. Tree diversity, in terms of different species, sizes, and ages within any given stand would be reduced in harvested areas, but increased in the unharvested areas. Timber harvest would contribute to the local economy for 1 or 2 years. A 1 million-board-foot timber sale in the near future would provide about 10 work years of employment and generate about \$737,000 of revenue in the local economy. Availability of winter logging areas would be increased. Over the next 60 years the amount of harvest would not be very important to the local economy.

ENVIRONMENTAL CONSEQUENCES

Effects on Mineral Exploration and Development

Oil and gas leases would be issued subject to appropriate standard surface disturbance stipulations. There would be no impact on oil and gas within the WSA.

Locatable mineral exploration activity would be regulated by the 1872 Mining Law and the 43 CFR 3809 regulations. There would be no impact to exploration and development of existing or future claims under this alternative.

Conclusion: There would be no effect on exploration and development of oil and gas or locatable minerals.



PART III
BENNETT MOUNTAINS WSA

Chapter Two

Alternatives

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*Suppliers?
They will check*

PART III - BENNETT MOUNTAINS WSA (WY-030-304)

CHAPTER 2 - ALTERNATIVES

Introduction

Since the pattern of future actions within the WSA cannot be predicted with certainty, assumptions were made to allow for the analysis of impacts under the alternatives. These assumptions are the basis of the impacts identified in this EIS. They are not management plans or proposals, but represent feasible patterns of activities that could occur under the alternatives analyzed.

Alternatives Eliminated from Detailed Study

An alternative to designate only part of the WSA as wilderness was considered. However, it was determined that the WSA is too small in size to make any reductions. Also, there are no logical boundaries for partial wilderness.

An alternative to enhance wilderness in the WSA by closing boundary roads and adding additional acreage was considered. However, there are no feasible opportunities to do this. The area outside of the WSA does not have the wilderness characteristic of naturalness because of existing intrusions which include powerlines and roads.

An alternative to intensively manage the Bennett Mountains WSA for recreation, wildlife, and livestock grazing was considered, but it was determined that the potential benefits were low and the alternative was therefore not feasible. For example, the WSA contains no crucial winter range for big game and habitat conditions are good. Therefore, intensive management of wildlife habitat would not greatly improve habitat conditions or benefit wildlife populations.

Alternatives Considered in Detail

Two alternatives were analyzed for the Bennett Mountains WSA: (1) No Action: No Wilderness (the Proposed Action) and (2) All Wilder-

ness. Descriptions of the management direction for the alternatives follow.

Proposed Action - No Action: No Wilderness

Under this alternative, the Bennett Mountains WSA (6,003 acres) would be recommended as nonsuitable for designation as wilderness. The WSA would be managed for dispersed recreation.

Wilderness Management

The WSA would not be recommended for wilderness designation and would be subject to actions that would enhance dispersed recreation. No special emphasis would be placed on preservation of wilderness values.

Recreation Management

The objective is to provide for continuation of existing forms of recreation such as hunting, camping, wildlife viewing, and backpacking.

Recreational objectives would be designed to promote dispersed activities such as hunting, hiking, and horseback riding.

ORV use would be limited to existing roads and trails. Approximately 4 miles of two-track trails would remain available for ORV use.

Recreational use is expected to remain stable at 1,000 visitor days per year.

Minerals Management - Oil and Gas and Locatables

There are no pre-FLPMA oil and gas leases. There are eight post-FLPMA oil and gas leases that are subject to the special and regular stipulations attached to each lease. New oil and gas leases would be issued subject to standard protection requirements for surface-disturbing activities (available from any BLM office in Wyoming). *See Appendix*

No development is expected because of the low potential for oil and gas accumulation and the difficulty of access. However, it is expected that

ALTERNATIVES

one exploratory well would be drilled in the southeastern portion of the WSA at some time in the future, since that is the only portion easily accessible to oil and gas exploration. The exploratory well would result in about 20 acres of surface disturbance.

There are currently no pre- or post-FLPMA mining claims. New mining claims would be allowed, and they would be subject to the Surface Management Regulations of 43 CFR 3809 governing surface management of public lands under U. S. mining laws. No mining claim activity is expected, since the overall potential for locatable minerals is low.

All Wilderness Alternative

Under this alternative, the Bennett Mountains WSA (6,003 acres) would be recommended as suitable for designation as wilderness. Management of the area would be guided by BLM's Wilderness Management Policy, issued September 24, 1981. Management would provide for protection and preservation of the area's natural conditions and wilderness character.

Wilderness Management

The objective would be to protect and preserve the area's natural conditions and wilderness character.

Activities such as the use of motorized equipment and vehicles and mining would be restricted. Specific restrictions are included in the following discussions.

A wilderness management plan would be written for the area outlining specific management guidance. The plan would be written according to the guidelines in BLM's Wilderness Management Policy and BLM Manual Section 8561, Wilderness Management Plans, available at most BLM offices.

Recreation Management

The objective is to provide for primitive forms of recreation such as hunting, camping, and backpacking.

The entire WSA would be closed to ORVs. Approximately 4 miles of seldom used two-track trails currently available for ORV use would be affected.

Recreational use was estimated to be 1,000 visitor days in 1985. This level of use is expected to remain constant in the future with nonmotorized forms of recreation replacing motorized recreation displaced by the ORV closure.

Minerals Management - Oil and Gas and Locatables

There are no pre-FLPMA oil and gas leases. There are eight post-FLPMA oil and gas leases that are subject to the special and regular stipulations attached to each lease. In addition, all existing leases would be subject to nonimpairment criteria as described in the interim management policy and guidelines for lands under wilderness review. This policy states that only activities that do not degrade wilderness values would be permitted on post-FLPMA leases. No new oil and gas leasing would be allowed.

Currently there are no mining claims in the WSA. ~~The area would be open to mining location until designation as wilderness. Any mining claims located prior to designation as wilderness would be subject to the interim management policy. This policy allows only activities that do not impair wilderness values. If a discovery were made using nonimpairing methods, then a claimant would be entitled to a patent on those claims.~~

After a WSA is designated wilderness no new mining claims would be allowed. Validity examinations would be required before allowing operations on claims. Mining development would be carried out in a manner that prevents unnecessary or undue degradation of wilderness character. Nonimpairing mineral surveys or studies, such as surface exams subject to wilderness management constraints, would be allowed. No mining claim activity is expected, since the overall potential for locatable minerals is low.

TABLE 6
SUMMARY OF IMPACTS
Bennett Mountains WSA

Issues	Proposed Action No Action: No Wilderness	All Wilderness
Effects on Wilderness Values	Continued ORV use would degrade opportunities for solitude and primitive recreation somewhat. Expected oil and gas exploration would degrade the wilderness values of solitude and naturalness during drilling. In the long term the effect on naturalness would become unnoticeable because of reclamation.	Naturalness, opportunities for solitude, and opportunities for primitive and unconfined recreation would be protected in the Bennett Mountains WSA. The scenic quality of the area would be preserved. Closing the area to ORV use would enhance opportunities for solitude and primitive recreation somewhat.
Effects on Recreational Opportunities	Recreational use and values would be little changed. Oil and gas exploration could displace recreationists during drilling.	Recreational activities currently associated with ORV use such as hunting or sightseeing would continue without the use of motor vehicles. Primitive recreational values and opportunities would be protected and enhanced somewhat by the lack of motorized vehicle traffic.
Effects on Mineral Exploration and Development	There would be no effect on exploration and development of oil and gas or locatable minerals.	New oil and gas leasing and mining claims would be prohibited, so the availability of currently unrecognized oil and gas reserves and mineral deposits would be forgone. The nonimpairment criteria would effectively preclude drilling an exploratory well. Since the potential for these resources is low and no development is projected, the effects would be minor.



PART III
BENNETT MOUNTAINS WSA

Chapter Three

Affected Environment

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PART III - BENNETT MOUNTAINS WSA (WY-030-304)

CHAPTER 3 - AFFECTED ENVIRONMENT

Introduction

There are many environmental components that would be unaffected by either of the alternatives for management of the Bennett Mountains WSA. Since they would not be affected, they are not described in detail in this chapter. These environmental components are covered briefly in the following paragraphs.

Many environmental components are simply not present in the WSA and therefore would not be affected. This includes areas of critical environmental concern (ACEC), coal resources, nonenergy leasable minerals, fisheries, floodplains, prime or unique farmlands, wetlands, wild horses, and wild or scenic rivers (designated or proposed).

Other environmental components are present in the WSA, but none of the management actions proposed would affect them. These include air quality, climate, cultural resources, forest resources, livestock grazing, topography, water yield, and water quality.

No lands and realty actions are proposed or projected for the WSA, so none would be affected.

There are no permits for salable minerals in the WSA. Because of inaccessibility and the existence of saleable mineral deposits closer to areas where they are needed, saleable mineral deposits in the WSA are not considered commercial. Development of saleable minerals is not expected. Thus, availability of saleable minerals would not be affected.

Restricting ORV use can potentially reduce soil erosion. However, in this WSA, ORV use is relatively light and is dispersed such that effects on soil erosion would be negligible.

Wildlife habitat would not be materially affected under either alternative. Mule deer and elk use the area, but there is no crucial winter range for either. No actions are proposed that would disturb wildlife habitat to any great degree.

Threatened or endangered species would be unaffected by the management alternatives for the WSA. The Bennett Mountains WSA is within

the range of the bald eagle, peregrine falcon, and black-footed ferret which are protected by the Endangered Species Act (1964, as amended). However, no documented observations of these three species have been made in the WSA. Bald eagles may occasionally use the area during the winter for hunting. Peregrines are believed to migrate through the area in late fall and early spring. However, the WSA contains no breeding, nesting, or wintering habitat that would be essential to the recovery of either species. The area does not contain any prairie dogs, primary food of black-footed ferrets, so the existence of ferrets in the WSA is unlikely.

General Description

The Bennett Mountains are located in north central Carbon County east of Seminole Dam.

Vehicle access to the WSA during the warmer months is limited to unimproved two-track roads, trails, or ways. The only legal public vehicle access is by the Bennett Mountain/Dry Lake Road at the west end of the WSA. All other roads cross private land through which there is no legal access. Some visitors have crossed Seminole Reservoir by boat and walked into the WSA in the summer, or crossed the ice by snowmobile in the winter. Other roads are the Hanna-Leo road which is approximately one mile east of the WSA, and the Kortes Dam road which is approximately one mile northwest of the WSA. Nonvehicle public access is available from both of these roads. During most of the winter, the WSA is inaccessible except by snowmobile.

The WSA ranges in elevation from approximately 6,600 to 8,000 feet.

There are three basic types of topography in the WSA: (1) the mountain plateau/ridges, (2) the steep rock ledges and walls, and (3) the many tributary draws (see photographs 4 and 5). The mountain, which is approximately four miles long, has distinct rocky ledges and walls along the entire southern exposure, and the northern portion is traversed with numerous tree-filled drainages. In many places, the rocky walls are vertical outcrops that create a fortress type appearance. In most cases, all portions of the WSA are interspersed with grasses, sagebrush and other shrubs, and pockets of pine, aspen, and willows. The higher elevations have considerably less vegetation and more rugged rocky features.

AFFECTED ENVIRONMENT



Bennett Mountains WSA looking east from the western border.



Timber pine trees among massive granite outcrops in the Bennett Mountains WSA.

AFFECTED ENVIRONMENT

Wilderness Values

Size

The Bennett Mountains WSA contains 6,003 acres of public land. No private or state inholdings and no split-estate lands are located within the WSA boundary.

Naturalness

Man's influence is, for the most part, unnoticeable. The only intrusions are approximately 4 miles of two-track trails. These are not noticeable from a distance and do not impair the wilderness character of the WSA.

Outstanding Opportunities for Solitude and/or a Primitive, Unconfined Type of Recreation

The high plateau, coupled with numerous draws and rocky outcrops, provides a high degree of solitude. The mountain offers numerous secluded places for recreational activities. These features, along with pockets of overstory vegetation, offer screening for visitors throughout most of the WSA.

There are no developed recreational sites in or adjacent to the WSA. The Bennett Mountains WSA provides opportunities for primitive recreational activities that primarily include hunting, hiking, trapping, camping, wildlife viewing, and sightseeing.

Special Features

The mountain conveys a feeling of uncluttered open space, isolation, and peacefulness. This is accentuated by the altitude difference between the WSA and the surrounding low-lying plains. Its drainages and steep rock walls contrast sharply with adjoining landscapes. The topography and vegetation are quite different from the surrounding area. The contrast between the WSA and surrounding plains is very abrupt as the plains below are relatively low and rolling.

The area has a Class II, Visual Resource Management rating. The Bennetts offer a spectacular view of Seminole Reservoir, which adds significantly to the quality of the scenery.

Recreational Resources

The Bennett Mountains WSA provides opportunities for primitive recreational activities that include hunting, hiking, trapping, camping, wildlife viewing, and sightseeing. Use is primarily by Wyoming residents for all types of recreation, but nonresident hunters frequent the mountain during hunting season. All activities are dispersed.

Recreational use within the WSA was estimated to be approximately 1,000 visitor days in 1985. Most of the estimated visitor days are attributable to hunting or wildlife viewing activities. A limited amount of camping takes place during the hunting season. Use is concentrated primarily along the fringes of the WSA. Hiking and backpacking activities occur during the summer months but levels of use are low. Sightseeing and camping are largely associated with other recreational activities.

Hunting is the primary recreational activity. Mule deer are hunted throughout the area, and elk hunting occurs but is not significant. Visitor use is relatively constant from year to year with most use occurring in September and October.

Vehicle access points are available almost anywhere along the boundary of the WSA. However, all except one access point are accessible only by crossing private lands through which there currently is no legal public access. Until the early 1970s, public access across Seminole Dam was permitted by the Bureau of Reclamation. After this route was closed, public use on the east side of Seminole Reservoir and the south side of Bennett Mountains declined drastically. Access by boat across Seminole Reservoir is available in the summer and by snowmobile when the lake is frozen in winter. The primary means of travel within the WSA are hiking and horseback riding for which access is available. ORV use occurs on the two-track trails within the WSA. There are approximately four miles of two-track trails in the WSA.

Oil, Gas, and Other Minerals

Geologic Setting

The Precambrian rocks of the Bennett Mountains consist of a series of metasedimentary, metaigneous and metavolcanic rocks, potentially similar to the Western Seminole Range.

AFFECTED ENVIRONMENT

Paleozoic and Mesozoic sedimentary rocks are found on the south side of the Bennett Mountains WSA. The Precambrian geology of the Bennett Mountains WSA is poorly known, and there is little published information available defining the variety of metamorphic rock types in the area.

The Bennett Mountains WSA is geologically complex. Paleozoic and Mesozoic units crop out along the south side, while Tertiary (2 to 70 m.y.B.P.) sedimentary rocks have been identified only on the north side. Surficial deposits in the WSA consist of pediment gravels that are found along the flanks of the range.

The major bedrock unit that forms the core of the range is a series of Precambrian rocks. Rock types identified in the Bennetts include granite gneisses, amphibolites, alaskites, amphibolite gneisses and metadiabase dikes.

Overlying the Precambrian rocks is a Paleozoic section exposed along the south flank of the Bennett Mountains. The formations exposed include the Flathead Sandstone, Madison Limestone, Amsden Formation, Tensleep Sandstone, and Casper Formations.

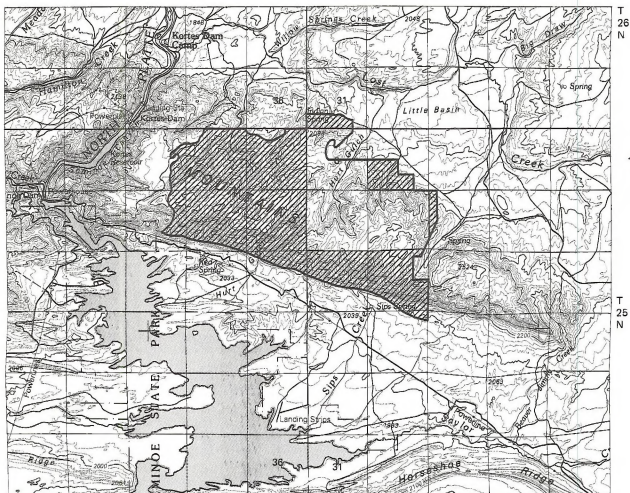
The Bennett Mountains are associated with the Sweetwater uplift and the north and south Granite Mountains fault system. During the Laramide orogeny (Cretaceous-Tertiary age), the uplift in

this area caused considerable structural deformation in the adjacent Paleozoic and Mesozoic sedimentary rocks, considerable potassic alteration and metasomatic effects along the north and south Granite Mountain fault system.

Oil and Gas

Portions of eight post-FLPMA oil and gas leases exist in the WSA (see map 7). These leases are subject to the special and regular stipulations attached to each lease (see table 7). The potential for oil and gas is believed to be low to none. Due to geology that is unfavorable for the accumulation of oil and gas deposits, the difficulty of access, and the difficulty in conducting drilling operations in these types of geologic conditions, it is unlikely that oil and gas development would occur in the Bennett Mountains WSA.

No mining claims are located in the WSA. Very little is known about possible mineralization. Jade and beryl gemstones are reported to occur in the vicinity but are unverified in the Bennett Mountains WSA. Gold, metallic sulfides, and iron mineralization are potential resources that may occur in the Precambrian rocks of the Bennett Mountains. The overall potential for locatable mineral development is low.



T 26 N

T 25 N

R 84 W

R 83 W



SCALE IN MILES

— Bennett Mountains WSA Boundary

▨ Post-FLPMA Oil and Gas Leases



Map 7
**POST-FLPMA OIL AND GAS LEASES
 IN THE BENNETT MOUNTAINS WSA**
 Medicine Bow Wilderness Supplement

AFFECTED ENVIRONMENT

TABLE 7
BENNETT MOUNTAINS WSA
POST-FLPMA OIL AND GAS LEASE ABSTRACT

Lease Number	Total Lease Acres	Lease Acres in WSA ¹	Effective Date	Stipulations
W-59124	2,320.00	90	July 1, 1977	1,2,3
W-73050	4,044.39	250	April 1, 1981	2,4
W-62213	1,600.72	80	May 1, 1978	2,5
W-63539	1,282.32	1,040	July 1, 1978	2,6,7
W-64013	2,515.82	1,270	December 1, 1978	2,8,9,10
W-64014	642.07	570	September 1, 1979	2,10,11
W-64011	1,753.25	580	November 1, 1978	2,12,13,14, 15,16

¹ Approximate acreages.

1. No occupancy within 200 feet Red Springs Draw, Hurt Gulch and 1,000 feet high water line Seminole Reservoir.
2. No occupancy slopes greater than 25 percent without written permission.
3. Drilling allowed only from April 15 to December 25.
4. No drilling or storage facility allowed within 250 feet of unnamed tributary of Lost Creek, House Gulch Reservoir, Spencer Draw, and Hurt Gulch without written permission.
5. No occupancy or surface disturbance within 200 feet of Sips Creek and tributaries, Cottonwood Creek, and unnamed creeks in Sections 20 and 21 without written permission.
6. No occupancy or surface disturbance within 200 feet of Sips Creek, unnamed tributaries, and Cottonwood Creek without written permission.
7. No drilling or storage facilities within 500 feet of Sips Spring without written permission.
8. No occupancy or surface disturbance within 1,320 feet of the North Platte River (Seminole Reservoir) without written permission.
9. No drilling or storage facilities within 500 feet of live streams located in Section 8, T. 25 N., R. 84 W. without written permission.
10. Drilling and other exploration activity allowed only from April 15 to December 15 unless written permission is given.
11. No drilling or storage facilities within 500 feet of live streams of Cottonwood drainage located in Section 18, T. 25 N., R. 84 W. without written permission.
12. No drilling or storage facilities within 500 feet of No. 1 and No. 2 Gulch and Kortez Reservoir without written permission.
13. Exploration, drilling or other development prohibited during wet or muddy periods when notified by the District Manager, BLM.
14. No occupancy or other surface disturbance allowed within 250 feet of live water Hurt Gulch, Spencer Draw, House Gulch, House Gulch Reservoir and the unnamed stream located in Section 11, T. 25 N., R. 83 W. without written permission.
15. No surface occupancy, directional drilling from privately owned land allowed.
16. No surface occupancy 75 feet each side of right-of-ways under administration of the Bureau of Reclamation.

PART III
BENNETT MOUNTAINS WSA

Chapter Four

Environmental Consequences

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PART III - BENNETT MOUNTAINS WSA (WY-030-304)

CHAPTER 4 - ENVIRONMENTAL CONSEQUENCES

Proposed Action - No Action: No Wilderness

Effects on Wilderness Values

Continued ORV use would degrade opportunities for solitude and primitive recreation. This effect would be primarily limited to the months of September and October when most of the visitor use occurs.

Expected oil and gas exploration would disturb about 20 acres. The wilderness values of naturalness and solitude would be degraded over a much larger area during drilling activity. The effect on naturalness would become unnoticeable in the long term as a result of reclamation efforts.

Conclusion: Continued ORV use would degrade opportunities for solitude and primitive recreation. Expected oil and gas exploration would degrade the wilderness values of solitude and naturalness during drilling. In the long term the effect on naturalness would become unnoticeable because of reclamation.

Effects on Recreational Opportunities

Under this alternative, recreation in the Bennett Mountains would remain largely unchanged in the long term. The volume of big game hunting would gradually increase somewhat, but the overall level of recreation use would remain at about 1,000 visitor days.

Expected oil and gas exploration would not greatly affect recreational opportunities. Drilling an exploratory well would displace recreationists from the drilling site during drilling. This effect would be short-term, lasting only for the time drilling occurs, and would be limited to a small portion of the WSA.

Conclusion: Recreational use and values would be little changed. Oil and gas exploration could displace recreationists during drilling.

Effects on Mineral Exploration and Development

There are eight existing oil and gas leases in the WSA. New oil and gas leases would be issued subject to appropriate standard surface disturbance stipulations. No development is anticipated, but one exploratory well would be expected in the southeastern portion of the WSA. There would be no impact to oil and gas leasing, exploration, or development.

There are no mining claims in the WSA. Locatable mineral exploration activity would be regulated by the 1872 Mining Law and the 43 CFR 3809 regulations. No mining claim activity is expected. There would be no impact to exploration and development of locatable minerals.

Conclusion: There would be no effect on exploration and development of oil and gas or locatable minerals.

All Wilderness Alternative

Effects on Wilderness Values

Under this alternative the Bennett Mountains WSA would be recommended suitable for wilderness designation. Upon designation, the area would be managed according to the guidelines of BLM's wilderness management policy. Activities that would impair the wilderness character of the area would be restricted. This would help ensure the long-term protection of the wilderness values of naturalness, opportunities for solitude, and opportunities for primitive and unconfined recreation. It would also help ensure the preservation of the area's scenic qualities.

Closing the area to ORV use would enhance opportunities for solitude and primitive recreation. This effect would be minor, since current ORV use is relatively low.

ENVIRONMENTAL CONSEQUENCES

Oil and gas exploration would not be expected to occur. The nonimpairment criteria would effectively prohibit drilling of an exploratory well. Thus, the wilderness values of naturalness and solitude would not be degraded by oil and gas exploration.

Conclusion: Under this alternative, the wilderness values of naturalness, opportunities for solitude, and opportunities for primitive and unconfined recreation would be protected in the Bennett Mountains WSA. The scenic quality of the area would be preserved. Closing the area to ORV use would enhance opportunities for solitude and primitive recreation. The wilderness values of naturalness and solitude would not be degraded by oil and gas exploration since an exploratory well would not be expected under the nonimpairment criteria.

Effects on Recreational Opportunities

Recreational use would remain largely unchanged. Wilderness designation would allow this area to be utilized for nonmotorized activities that are historically important and increasingly popular in this area. Recreational activities currently associated with ORV use, such as hunting or sightseeing, would continue without the use of motor vehicles. The WSA is small enough that recreationists could easily walk from boundary access points into the area for these activities. The volume of big game hunting would gradually increase somewhat, but the overall level of recreation use would remain at about 1,000 visitor days.

Closing four miles of two-track trails in the WSA would not have a great effect on opportunities for motorized recreation in the region. The routes are deadend, and ORV use is incidental.

Primitive recreational values and opportunities would be protected and enhanced under this alternative, because there would be no motorized vehicle traffic.

Conclusion: Closing four miles of two-track trails in the WSA would not have a great effect on opportunities for motorized recreation in the region. Recreational activities currently associated with ORV use such as hunting or sightseeing would continue without the use of motor vehicles. Primitive recreational values and opportunities would be protected and enhanced by the lack of motorized vehicle traffic.

Effects on Mineral Exploration and Development

There are eight existing oil and gas leases in the WSA. No new leasing would be allowed, so the availability of currently unrecognized oil and gas reserves would be forgone. The nonimpairment criteria would effectively prohibit drilling of an exploratory well. Since oil and gas potential is low and no development is projected, the effects of wilderness designation on oil and gas exploration and development would be minor.

There are no mining claims in the WSA. Upon designation, no new mining claims would be allowed, so the availability of currently unrecognized mineral deposits would be forgone. The area would be unavailable for further exploration except for certain nonimpairing resource surveys. The geology of the Bennett Mountains WSA appears to have low favorability for significant hardrock mineralization. No mining claim activity is expected, so these effects would be minor.

Conclusion: New oil and gas leasing and mining claims would be prohibited, so the availability of currently unrecognized oil and gas reserves and mineral deposits would be forgone. The nonimpairment criteria would effectively prohibit drilling of an exploratory well. Since the potential for these resources is low and no development is projected, the effects would be minor.

Chapter Five

Consultation and Coordination

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CHAPTER 5

CONSULTATION AND COORDINATION

COORDINATION AND PUBLIC INVOLVEMENT

Introduction

The Draft Wilderness Environmental Impact Statement for the Medicine Bow Resource Area has been prepared by specialists from the BLM's Medicine Bow Resource Area, with assistance from the Rawlins District Office.

Public participation has been an ongoing process throughout the inventory and planning phases of the wilderness review required by FLPMA. The review process included inventories of resources, public participation, and coordination with individuals, organizations, and other agencies. Care has been exercised to inform the public throughout the wilderness review process.

A *Federal Register* notice and news release in February 1986 announced the initiation of the Medicine Bow RMP and wilderness EIS, inviting comments and soliciting suggestions and input on issues identified to be analyzed in the land use planning effort including wilderness.

Wilderness has been a topic in formal and informal meetings involving many members of the ranching community and minerals industries and with other interest groups and agencies. Public opinion was elicited through mailings to an extensive list of groups and individuals; personal interviews; and public meetings in Rawlins, Saratoga, Laramie, Medicine Bow, Baggs, and Wheatland. A summary of the comments generated from those meetings is on file in the Medicine Bow Resource Area.

Consistency

Federal, state and local agencies, and organizations were considered during the preparation of this EIS. Wilderness suitability recommendations resulting from this EIS were analyzed in relationship to consistency with the plans of these agencies and organizations. No inconsistencies

with any existing state or other government plans were identified. Frequent contacts have been made with state, county, and Forest Service officials.

Agencies and Organizations Consulted

The wilderness EIS team has consulted with and or received input from numerous organizations during the development of this document. The Rawlins District Office maintains a lengthy wilderness mailing list. At each point in the overall wilderness review/EIS process, when public input is necessary or when some tentative decision regarding a WSA is reached, materials and/or information are sent to all groups, organizations and individuals on the mailing list.

The following list is representative of the agencies that have indicated an interest in the Medicine Bow Wilderness EIS and that have been contacted during the planning process. This list is not inclusive. A complete list is on file at the Medicine Bow Resource Area office.

Required Reviewers

- U.S. Department of the Interior
 - Bureau of Land Management (340), Washington, D.C.
 - Bureau of Land Management (931), Cheyenne, WY
 - Office of Environmental Project Review, Denver, CO
 - National Park Service, Division of Env. Compliance (WASO 762), Washington, D.C.
 - U.S. Fish and Wildlife Service, Chief, Division Environmental Coord., Washington, D.C.
 - Minerals Management Service Offshore Environmental Assessment Division, Washington, D.C.
 - Bureau of Reclamation, Division of Environmental Affairs, Washington, D.C.
 - Bureau of Mines, Mineral Data Analysis (MS-5000), Washington, D.C.
 - U.S. Geological Survey, National Center (423), Reston, VA
 - Office of Surface Mining, Division of Environmental & Economic Analysis, Washington, D.C.
- U.S. Department of Agriculture
 - Forest Service, Office of Environmental Coordination, Washington, D.C.
- U.S. Air Force
 - HQ USAF/LEER, Washington, D.C.

CONSULTATION AND COORDINATION

U.S. Air Force (Continued)
HQ-US LEVX, Office of Environmental Planning, Bolling
AFB, Washington, D.C.
Assistant Secretary of the Air Force, Installation
Environment and Safety, Pentagon, Admiralty, VA

U.S. Army Corps of Engineers
Chief, Planning Division, Omaha, NE
Chief, Planning Division, Portland, OR

Department of Energy (EP-36), Washington, D.C.

Nuclear Regulatory Commission, Bethesda, MD

Environmental Protection Agency, Denver, CO
Environmental Review Coordinator, EPA Region VIII,
Denver, CO

State of Wyoming, Wyoming State Clearing House,
Cheyenne, WY

Other Contacts

Federal Government
U.S. Department of Agriculture
Farmers Home Administration
Soil Conservation Service
U.S. Department of Transportation

State of Wyoming

Office of the Governor
Archives, Museums, and Historical Department
National Guard
State Board of Land Commissioners
University of Wyoming
Conservation Commission
Department of Agriculture
Department of Environmental Quality
Game and Fish Department
Geological Survey
Highway Department
Recreation Commission
State Engineer
Water Development Commission
Oil and Gas Conservation Commission
Public Lands Commission
Public Lands and Farm Loan District
State Historic Preservation Officer
State Planning Coordinator's Office

Indian Tribes

Arapahoe Business Council
Shoshone Business Council

Cities and Counties

Cities and towns of Bairoll, Cheyenne, Encampment, Hanna,
Laramie, Medicine Bow, Rawlins, Saratoga, and Wheatland.

County commissioners, county planning commissions, and
weed and pest control districts of Albany, Carbon, Laramie,
and Sweetwater counties.

United States Legislators

The Honorable Richard Cheney
The Honorable Alan K. Simpson
The Honorable Malcolm Wallop

State Elected Officials

Wyoming Governor's Office

State senators and state representatives from Albany,
Carbon, Laramie, and Sweetwater counties.

In addition to the agencies and offices listed
above, notices, requests for comments and
copies of this document have been sent to
businesses, organizations, interest groups, and
individuals. Copies of the wilderness EIS are
available for review in the BLM offices at Rawlins,
Lander, Worland, Rock Springs, Cheyenne, and
Casper and in the county libraries in Albany,
Carbon, Laramie, and Sweetwater counties.

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CONSULTATION AND COORDINATION

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Responsibility: Wildlife

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Technographics Support and Printing

The following personnel from the Wyoming State Office, BLM, provided technographics and printing support in the preparation of this document.

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Tina Warren, Printing Technician

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Coordination, Support, and Review

Coordination, support, and review were provided by the Division of Minerals, Division of Lands and Renewable Resources, and Division of Operations, Rawlins District. From the Wyoming State Office, coordination and review were provided by the Division of Lands and Renewable Resources, Branch of Biological Resources and Branch of Planning and Environmental Assistance.

Printing arrangements were made by the Branch of Administrative Services, Wyoming State Office.

Glossary



GLOSSARY

- ALASKITE.** A leucocratic (light colored) form of granite.
- ALLOTMENT.** An area allocated for the use of the livestock of one or more qualified grazing lessees. It generally consists of BLM-managed lands but may include parcels of private or state-owned lands. The number and kind of livestock and period of use are stipulated for each allotment. An allotment may consist of several pastures or may be only one pasture.
- AMPHIBOLITE ROCKS.** Metamorphic rock consisting essentially of amphibole, a group of minerals with essentially like crystal structures involving a silicate chain, OH (Si_4O_{11}).
- ANTICLINE.** An upfold or arch of stratified rock in which the beds or layers bend downward in opposite directions from the crest or axis of the fold.
- ANIMAL UNIT.** A standardized unit of measurement for range livestock or wildlife. Generally, one mature (1,000-pound) cow or its equivalent, based on an average daily forage consumption of 26 pounds of dry matter per day.
- ANIMAL UNIT MONTH.** A standardized unit of measurement of the amount of forage necessary for the sustenance of one animal unit for one month; also, a unit of measurement that represents the privilege of grazing one animal unit for one month.
- ARCHEAN.** The term means ancient and has generally been applied to the oldest rocks of the Precambrian.
- BOARD FOOT.** A unit of solid wood 1 foot square and 1 inch thick.
- BROWSE.** The tender shoots, twigs, and leaves of trees and shrubs often used as food by deer, antelope, livestock, and other animals; to feed on browse.
- CLOSED (ORV).** Vehicle travel is prohibited yearlong with no exceptions other than for emergency vehicles in emergency situations. Access by means other than motorized vehicles is permitted.
- COMMERCIAL FORESTLAND.** Forestland that is now producing or is capable of producing at least 20 cubic feet of wood fiber per acre per year from commercial coniferous tree species, and which has met certain economic, environmental, or multiple use criteria for inclusion in the commercial forestland base.
- COVER.** Vegetation or terrain used by wildlife for protection from predators and adverse weather conditions. Cover is a major component of wildlife habitat.
- CRETACEOUS.** A period in time extending from approximately 70 to 135 million years before present.
- CRUCIAL HABITAT.** Habitat on which a species depends for survival because there are no alternative ranges or habitats available.
- CRUCIAL WINTER RANGE.** The portion of the winter range to which a wildlife species is confined during periods of heaviest snow cover.
- CULTURAL RESOURCE.** A fragile and nonrenewable remnant of human activity, occupation, or endeavor reflected in districts, sites, structures, building, objects, artifacts, ruins, works of art, architecture, and natural features.
- DIKE.** A thin, sheet-like intrusion of igneous rock cutting across the bedding or foliation of the country rock.
- ENDANGERED SPECIES.** Any plant or animal species that is in danger of extinction throughout all or a significant portion of its range, as defined by the U.S. Fish and Wildlife Service under the authority of the Endangered Species act of 1973.
- ENVIRONMENTAL IMPACT STATEMENT.** A written analysis of the impacts of a proposed project and alternatives.
- FELDSPATHIC.** Containing feldspar as a principal ingredient.
- FOLIATED.** The laminated structure resulting from segregation of different minerals into layers.
- FORAGE.** All browse and herbaceous foods available to grazing animals.
- FORESTLAND.** Land that is now, or is capable of becoming, at least 10% stocked with forest trees, which has not been developed for nontimber use.
- GNEISS.** A foliated metamorphic rock of medium to coarse grain. As used in the text the mineral name(s) preceding the term gneiss describe the composition of the rock. Thus, a calcite-garnet-epidote gneiss is a gneiss consisting of the minerals calcite, garnet, and epidote.
- HABITAT MANAGEMENT PLAN.** An officially approved activity plan for a specific geographic area of public land. An HMP identifies wildlife habitat and related objectives, defines the sequence of actions to be implemented to achieve the objectives, and outlines procedures for evaluating accomplishments.
- IGNEOUS.** Rock formed by solidification of a molten magma.
- INHOLDINGS.** Private or State owned land inside the boundary of a WSA, but excluded from the WSA.
- JEEP TRAIL.** A two-wheel track created only by the passage of vehicles. A trail is not a road.
- KYANITE.** An aluminum silicate (Al_2SiO_5) which commonly occurs as blue crystals.
- LEASABLE MINERALS.** Minerals subject to lease by the federal government, such as coal, oil and gas, oil shale, potash, sodium, phosphate, and other minerals that may be acquired under the Mineral Leasing Act of 1920, as amended. The major leasable minerals in the planning area are oil and gas and coal.
- LIMITED (ORV).** Vehicle travel is restricted in some manner in the area. Restrictions could take many forms, but the most common are "limited to existing roads and trails," which allows vehicle travel only on roads that were in existence at the time of designation or as authorized for future uses; "limited to designated roads and trails,"

GLOSSARY

- which allows vehicle travel only on roads that the BLM designates by signs; and "seasonal restrictions," which restricts vehicle travel in an area or on certain roads during some portion of the year (such as wintertime vehicle restrictions to protect big game on crucial winter range).
- Under limitations to existing or designated roads and trails, vehicle travel off roads is permitted only to accomplish necessary tasks and only if such travel would not result in resource damage. Necessary tasks are defined as work requiring the use of a motor vehicle. Examples include picking up big game kills, repairing range improvements, managing livestock, and mineral activities where surface disturbance does not total more than 5 acres, as described in the provisions of 43 CFR 3809.1-3.
- LOCATABLE MINERALS.** Generally, the metallic minerals subject to development specified in the Federal Mining Law of 1872. Examples are gold, silver, and copper.
- MAFIC.** Containing abundant dark colored minerals such as amphiboles, pyroxenes, and certain feldspars.
- MESOZOIC.** An era in time extending from approximately 70 to 225 million years before present.
- METAIgneous.** An igneous rock which has been metamorphosed.
- METAMORPHISM.** The process by which consolidated rocks are altered in composition, texture, or internal structure by conditions and forces not resulting simply from burial and the weight of subsequently accumulated overburden. Pressure, heat, and the introduction of new chemical substances are the principal causes.
- METASEDIMENTS.** A sedimentary rock which has been metamorphosed.
- METASOMATIC.** Produced by metasomatism which is the replacement, partly or wholly, of one mineral by another.
- METAVOLCANIC.** A volcanic rock which has been metamorphosed.
- NATURALNESS.** Refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (From section 2 (C), Wilderness Act)
- NONIMPAIRMENT CRITERIA.** A series of guidelines which govern surface disturbing activities on lands being studied by BLM for inclusion in the National Wilderness Preservation System. The guidelines require that lands be managed so as to not impair their suitability for designation as wilderness. Any authorized activities must be temporary in nature and not degrade the area's wilderness values. Disturbed areas must be capable of being reclaimed so that they are substantially unnoticeable by the time the Secretary of the Interior makes his recommendation on Wilderness Areas to the President.
- OFF-ROAD VEHICLE.** Any motorized tracked or wheeled vehicle designed for cross-country travel over any type of natural terrain. Exclusions (from Executive Order 11644, as amended by Executive Order 11989) are nonamphibious registered motorboats, any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes, any vehicle whose use is expressly authorized by the authorizing officer or otherwise officially approved, vehicles in official use, and any combat support vehicle in times of national defense emergencies.
- OROGENY.** The process of forming mountains particularly by folding and thrusting.
- ORTHOAMPHIBOLITE.** A rock resulting from the metamorphism of igneous rocks such as diabase basalt.
- OUTSTANDING.** Standing out among others of its kind; conspicuous; prominent; or, superior to others of its kind; distinguished; excellent.
- PALEOZOIC.** An era in time extending from approximately 225 to 570 million years before present.
- PEDIMENT.** A gently sloping surface produced by the erosion of steep slopes.
- PEGMATITE.** A very coarse-grained igneous rock with a composition similar to granite. It is usually found in veins or dikes.
- POTASSIC.** Pertaining to or containing potassium.
- PRECAMBRIAN ROCKS.** Igneous and metamorphic rocks formed during Precambrian time, which ended approximately 570 million years before present.
- PRIMITIVE UNCONFINED RECREATION.** Nonmotorized and nondeveloped types of outdoor recreational activities.
- PROTEROZOIC.** The entire Precambrian era.
- PROTOCONTINENT.** A primitive continental nucleus.
- PUBLIC LAND.** As used in this document, surface or mineral estate administered by the Bureau of Land Management.
- QUARTZ MONZONITE.** A common rock in large intrusions.
- RANGE IMPROVEMENT.** Any activity or program on or relating to rangelands that is designed to improve production of forage, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions, or provide habitat for livestock, wild and free-roaming horses and burros, or wildlife. Range improvement projects may be fences, reservoirs, brush control, or spring and well developments.
- RANGELAND MONITORING PROGRAM.** A program designed to measure changes in plant composition, ground cover, animal populations, and climatic conditions on the public rangeland. Studies monitor changes in range condition and determine the reason for any changes. Studies also monitor actual use, forage utilization, trend, and climatic conditions.
- RIPARIAN.** Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used to refer to plants of all types that grow rooted in the water table of streams, ponds, and springs.
- ROAD.** For the purpose of BLM's wilderness inventory, the following definition has been adopted from the legislative history of FLPMA:
- "The word 'roadless' refers to the absence of roads which have been improved and maintained by mechanical means to ensure relatively regular and continuous use. A trail maintained solely by the passage of vehicles does not constitute a road."
- To clarify this definition, the following subdefinitions also apply.
- Improved and Maintained** - Physical human actions taken to keep a road open to vehicular traffic. A trail maintained solely by the passage of vehicles does not constitute a road.

GLOSSARY

Mechanical Means - Use of hand or power machinery or tools.

Relatively Regular and Continuous Use - Vehicular use which has occurred and will continue to occur on a relatively regular basis. Examples are access roads for equipment to maintain a stock water tank or other established water sources, access roads to maintained recreation sites or facilities, or access roads to mining claims.

SALABLE MINERALS. Minerals that may be sold under the Material Sale Act of 1947, as amended. Included are sand, gravel, flagstone, scoria, and crushed rock such as limestone.

SCHIST. A metamorphic rock consisting predominately of mica minerals with a parallel orientation of the mica plates.

SHEAR. A tangential stress in which equal and opposite forces are imposed on either side of a plane and parallel to it. Shear stress tends to deform a body of rock by moving one part of it relative to another.

SILL. An intrusive body of igneous rock of approximately uniform thickness and relatively thin compared to its lateral extent which is emplaced parallel to the bedding of the intruded rock.

SOLITUDE. The State of being along or remote from habitations; isolation. A lonely, unfrequented, or secluded place. Factors contributing to opportunities for solitude are vegetative screening, topographic relief, vistas, and physiographic variety.

SPLIT ESTATE. Surface and minerals of a given area in different ownerships. Frequently the surface will be privately owned and the minerals federally owned.

THREATENED SPECIES. Any plant or animal species that is likely to become an endangered species throughout all or a significant portion of its range, as defined by the U.S. Fish and Wildlife Service under the authority of the Endangered Species Act of 1973.

TWO-TRACK TRAIL. See "Jeep Trail."

WILDERNESS. The definition contained in Section 2(c) of the Wilderness Act of 1964 is as follows: "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." Wilderness is an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

WILDERNESS AREA. An area formally designated by Congress as part of the National Wilderness Preservation System.

WILDERNESS STUDY AREA (WSA). A parcel of public land that through BLM's wilderness inventory process has been found to possess the basic wilderness characteristics of being at least 5,000 acres in size, being primarily natural, and having outstanding opportunities for solitude or primitive and unconfined types of recreation.



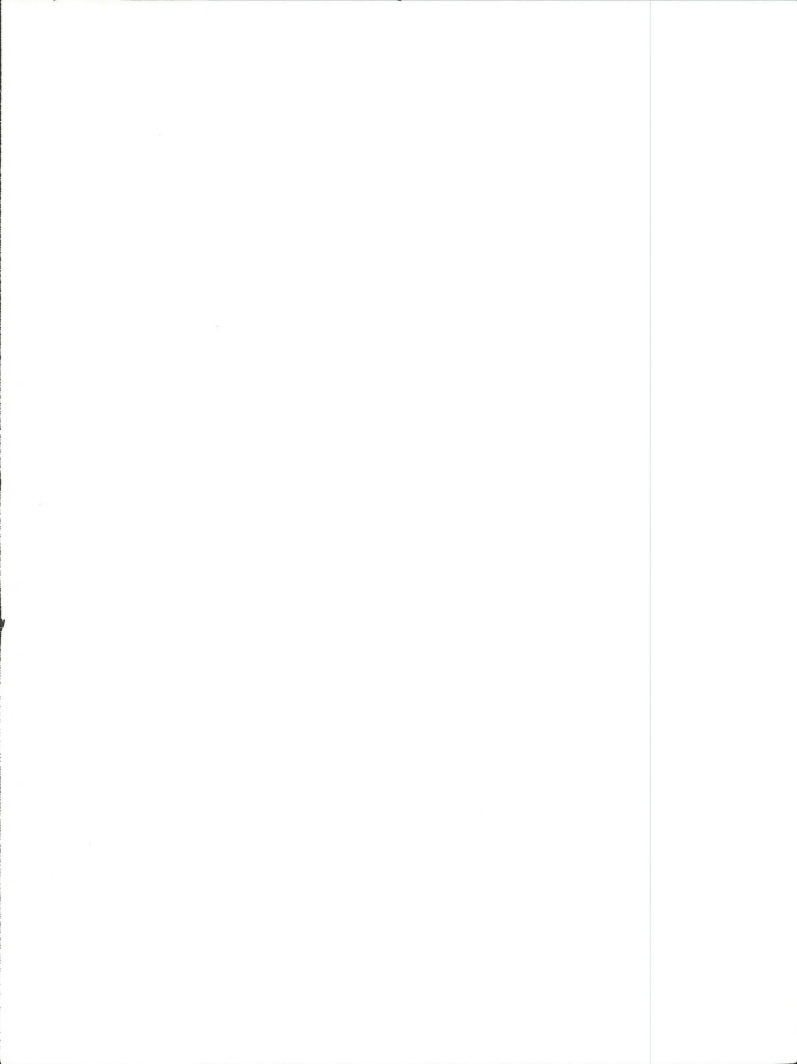
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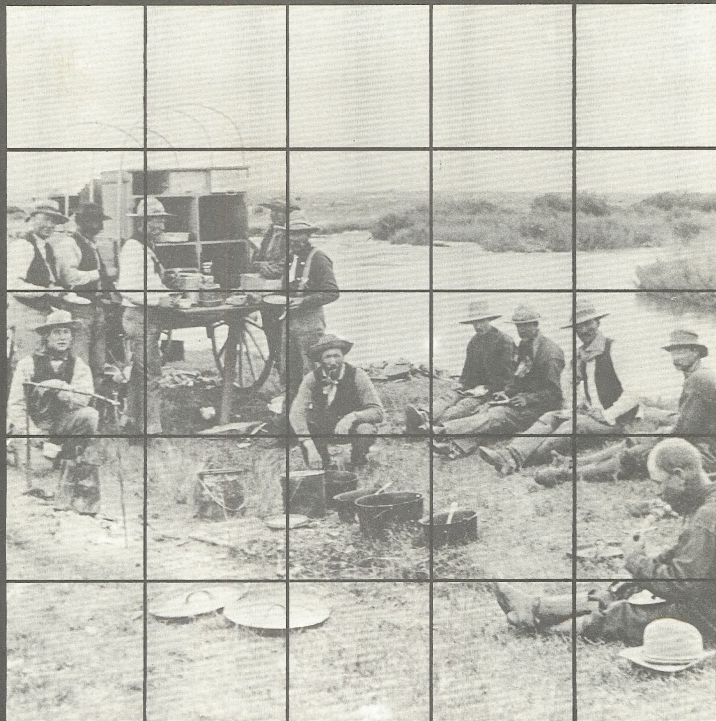
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