APPENDIX O

DETAILED DISCUSSION OF AREAS BEING STUDIES FOR WILDERNESS

INTRODUCTION

Purpose and Need

The purpose of this study is to determine the suitability or nonsuitability of four areas for designation as wilderness, in accordance with the guidelines in the Wilderness Act of 1964. This Study/EIS is mandated by Sections 603 and 202 of the Federal Land Policy and Management Act of 1976 (FLPMA) which directs the BLM to review all public land for its wilderness potential. The review process developed by BLM has three phases: inventory, study, and reporting.

ENVIRONMENTAL SETTING

The four areas analyzed in this document are located in the Garnet Resource Area, Butte District in western Montana (see location map). Table O-1 lists the areas and their acreages.

Wales Creek, Gallagher Creek, and Hoodoo Mountain are located in Powell County. Quigg West is located in Granite County.

WILDERNESS INVENTORY

The inventory phase identified areas that have wilderness characteristics, as defined in the Wilderness Act of 1964, and designated them as Wilderness Study Areas (WSAs). Guidelines for conducting the inventory phase were set forth primarily in the BLM's Wilderness Inventory Handbook (USDI, BLM 1978).

Because the Wales Creek area was located on the proposed route of the Northern Tier Pipeline, it was inventoried first. The area was found to have high quality wilderness values and was designated a wilderness study area in May 1979. Inventories on the other three areas; Gallagher Creek, Hoodoo Mountain, and Quigg West; were completed in September 1981, and all three were designated as wilderness study areas.

A decision by the Secretary of the Interior on December 30, 1982 stated that areas of public land that were less than 5,000 acres in size or had split estate ownership were not subject to wilderness review under Section 603 of FLPMA. However, areas less than 5,000 acres in size could be studied for wilderness under authority of Section 202 of FLPMA. Based on this decision, the two areas that were less than 5,000 acres, Gallagher Creek (MT-074-151B) and Quigg West (MT-074-155), are being studied under authority of Section 202 of FLPMA, while Wales Creek (MT-074-150) and Hoodoo Mountain (MT-074-151A) are being studied under Section 603. Boundaries and land status of each WSA are illustrated on the WSA Land Status maps.

WILDERNESS STUDY

The purpose of the study phase of the BLM wilderness program is to determine which WSAs and 202 WSAs will be recommended as suitable for wilderness designation and which will not. The study was conducted in accordance with BLM planning regulations (43 CFR 1601) which state national policy and procedural guidance. The BLM's Wilderness Study Policy establishes procedures to ensure that suitability recommendations are based on full consideration of all multiple resource values of public lands, are consistent with established national policy, and assure the opportunity for all interested and affected members of the public and state and local governments to comment and be involved in the study process.

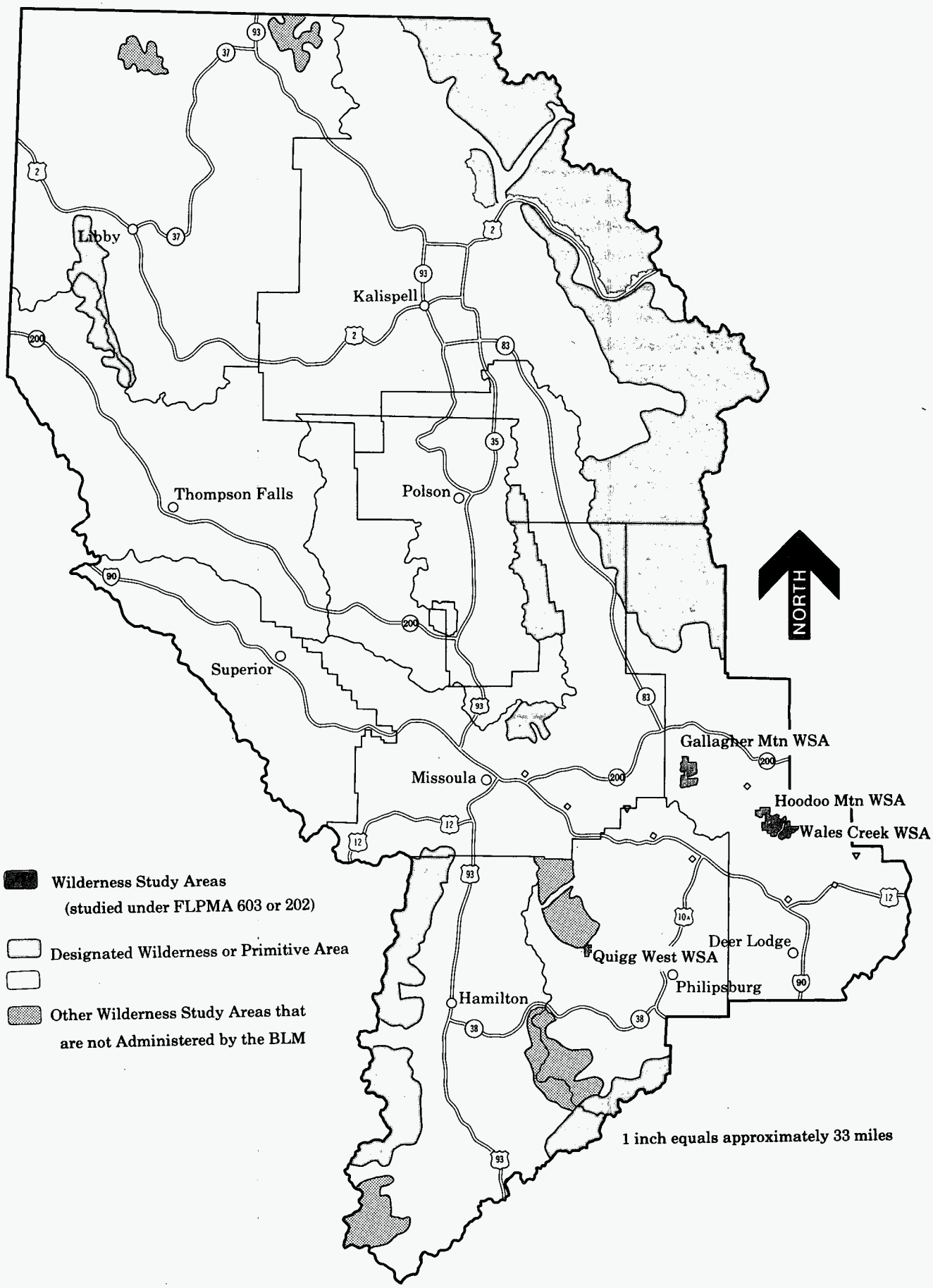
Issue Identification

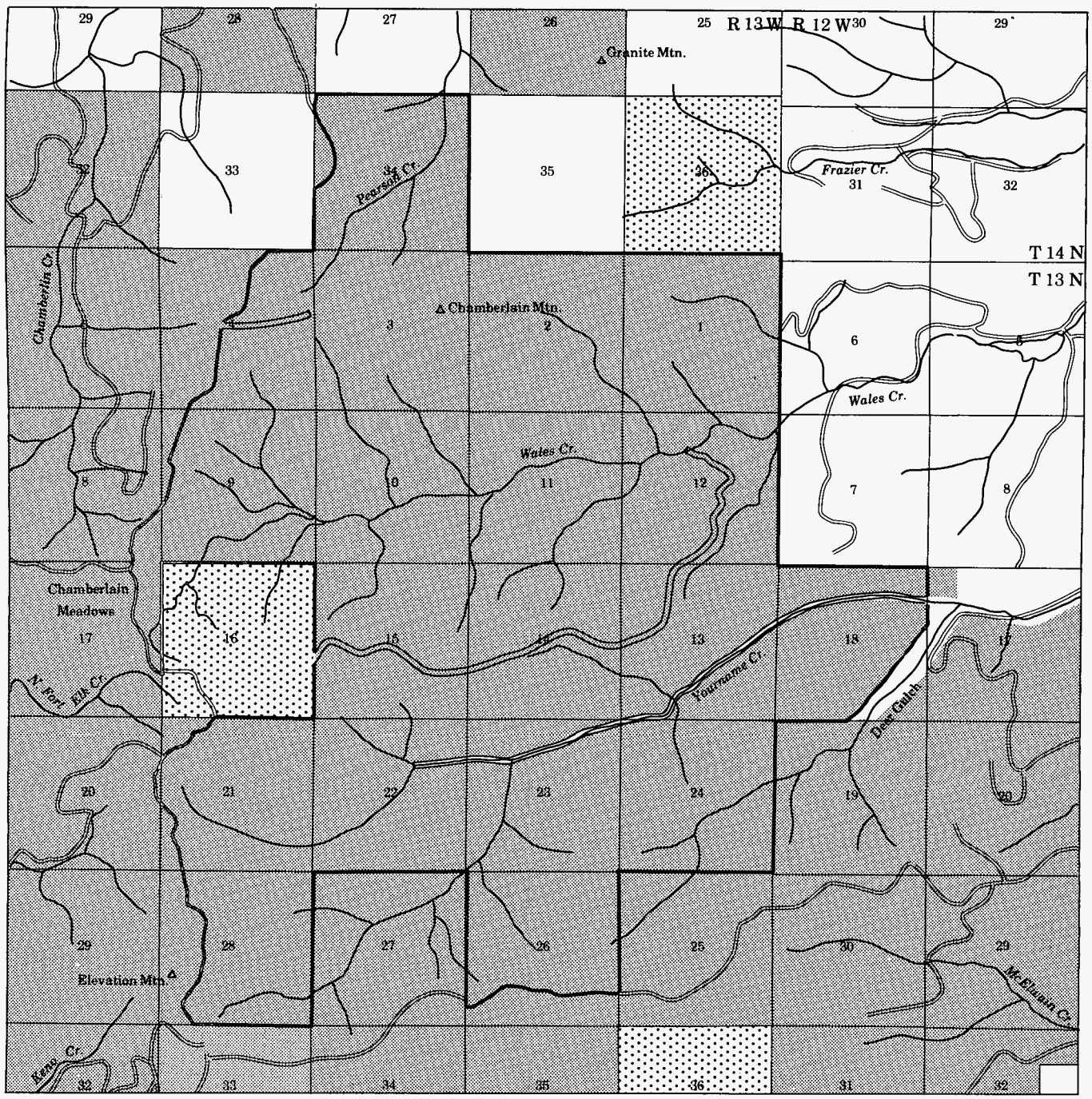
A scoping process took place to determine issues and associated conflicts to be addressed in the RMP for wilderness; this identification process was carried out at both a national and local level. Issues of national concern were identified and reflected, where possible, the development of the BLM's Wilderness Study Policy. At the local level, two major issues for wilderness were identified:

TABLE O-1

WILDERNESS STUDY AREAS ANALYZED IN THIS DOCUMENT

Wilderness Study Area	Number	Acreage
Wales Creek	MT-074-150	11,580
Hoodoo Mountain	MT-074-151A	11,380
Gallagher Creek	MT-074-151B	4,257
Quigg West	MT-074-155	520


Libby
Kalispell
Thompson Falls
Polson
Superior
Missoula
Hamilton
Philipsburg
Deer Lodge
Gallagher Mtn WSA
Hoodoo Mtn WSA
Wales Creek WSA
Quigg West WSA
NORTH
Wilderness Study Areas
(studied under FLPMA 603 or 202)
Designated Wilderness or Primitive Area
Other Wilderness Study Areas that
are not Administered by the BLM
1 inch equals approximately 33 miles



WSA Boundary

Public

State

Private

Improved Road

Unimproved Road or Vehicle Way

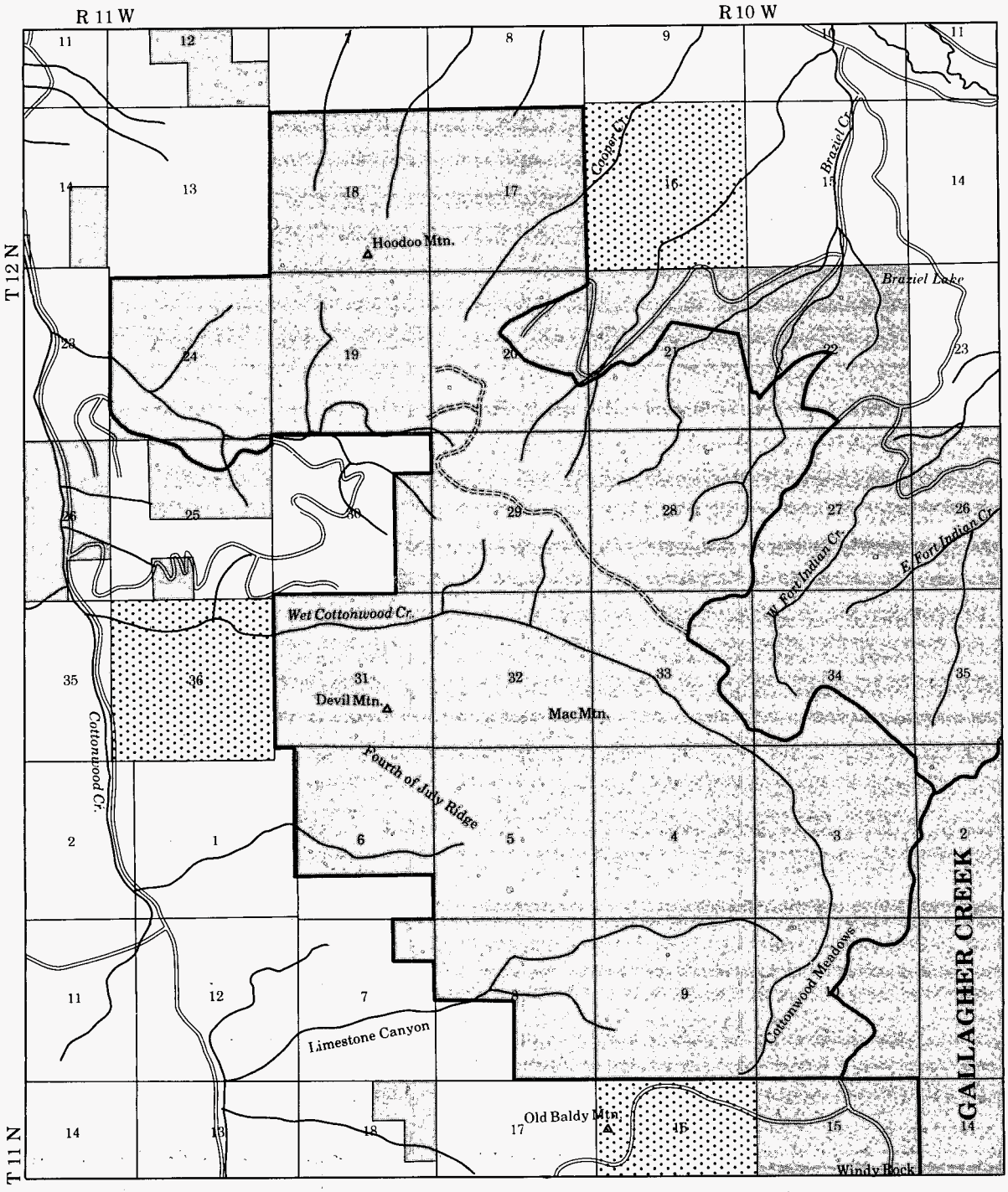
WALES CREEK LAND STATUS

NORTH

0 1 2 Miles

0 1 2 3 Kilometers

1:63,360



WSA Boundary

Public

Private

State

Improved Road

Unimproved Road or Vehicle Way

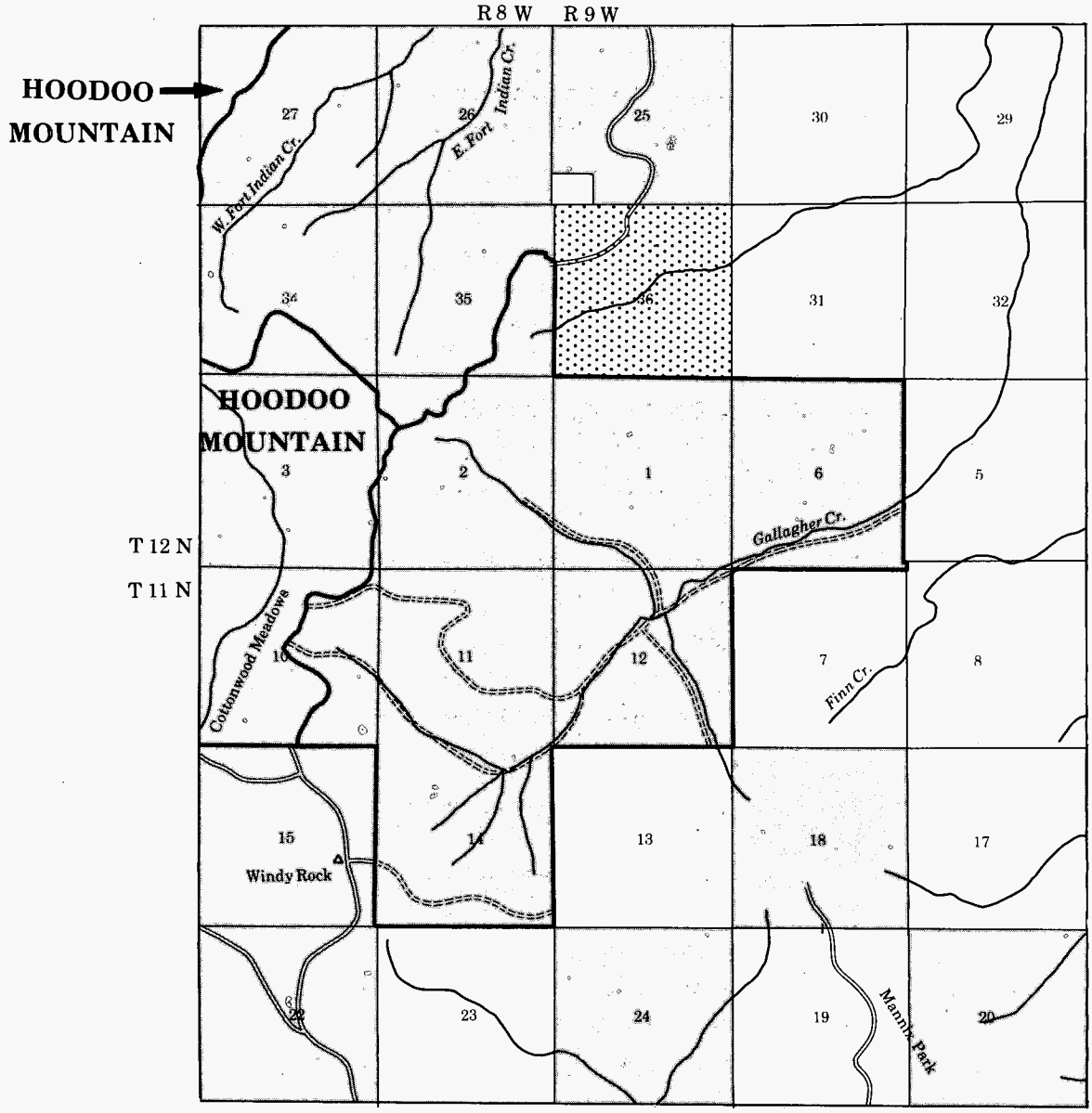
HOODOO MOUNTAIN LAND STATUS

1:63,360

NORTH

0 1 Miles 2

0 1 Kilometers 2 3



GALLAGHER CREEK LAND STATUS

WSA Boundary

Private

Public

Improved Road

Unimproved Road or Vehicle Way

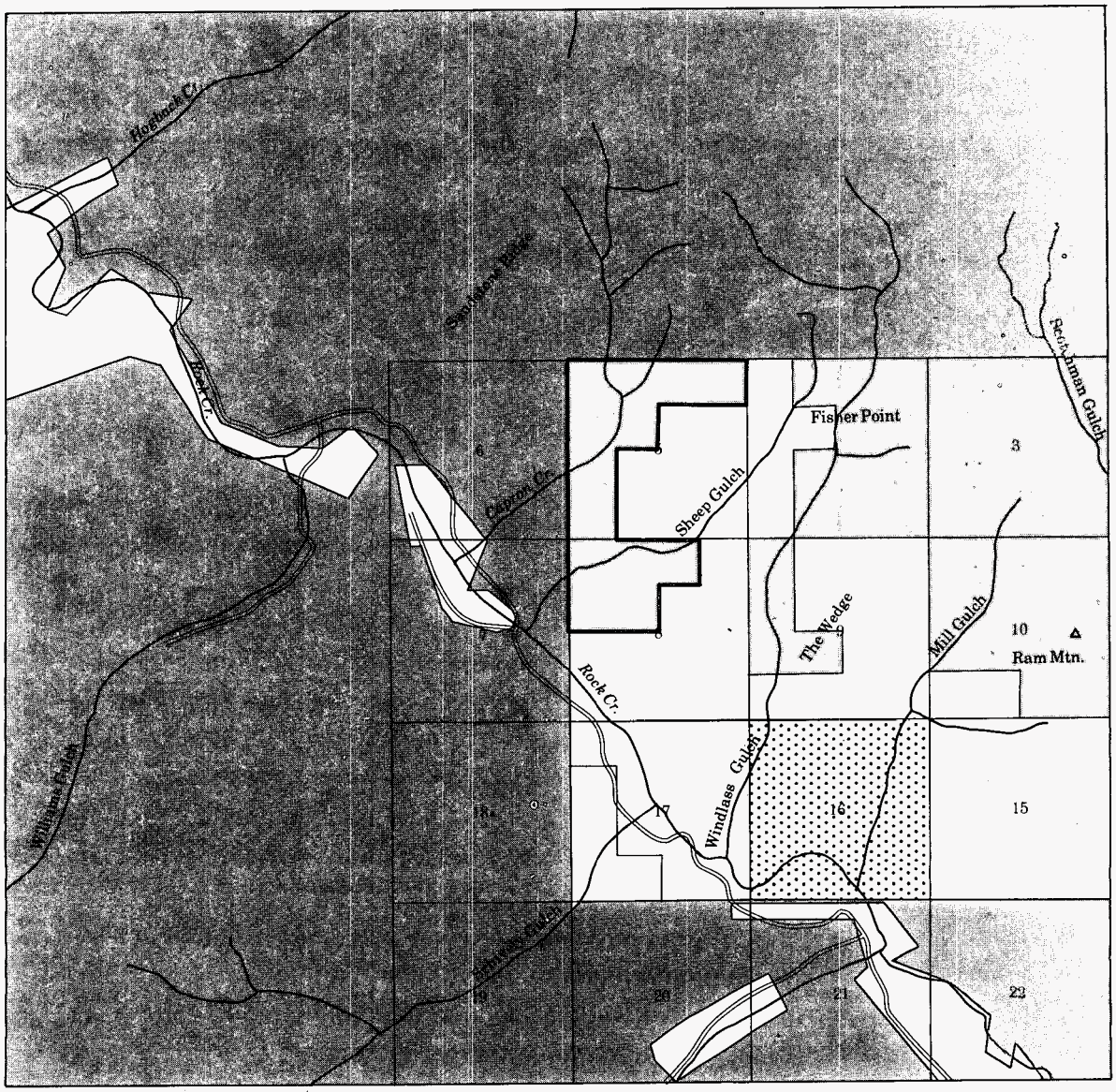
State

NORTH

0 1 2 Miles

0 1 2 3 Kilometers

1:63,360



QUIGG WEST LAND STATUS

WSA Boundary

Public

Private

Forest Service

Improved Road

State

Unimproved Road or Vehicle Way

NORTH

0 1 2 Miles

0 1 2 3 Kilometers

1:63,360

How much of the public land in each WSA or 202 WSA should be recommended to Congress as suitable for wilderness designation?

How will each area be managed if it is not designated as wilderness?

Development of Planning Criteria and Quality Standards

Based on the issues identified both nationally and locally, planning criteria and quality standards were developed in the BLM's Wilderness Study Policy to direct the procedures for evaluation of suitability and nonsuitability of each WSA.

Planning Criteria

The planning criteria were used to evaluate wilderness values and manageability.

Evaluation of wilderness values. This criterion considered the extent to which each of the following components contributed to the overall values of an area for wilderness purposes:

Mandatory Wilderness Characteristics. This component considered the quality of the area's naturalness, size, and outstanding opportunities for solitude or primitive recreation.

Supplemental Values. This component considered the presence or absence and the quality of optional wilderness characteristics such as ecological, geological, or other features of scientific, educational, scenic, or historical value.

Multiple Resource Benefits. This component considered the benefits to other resources and uses that would be ensured by wilderness designation of the area.

Diversity in the National Wilderness Preservation System. This component considered the extent to which wilderness designation of the area under study would contribute to expanding the diversity of the National Wilderness Preservation System from the standpoint of each of the following factors:

Expanding the diversity of natural systems and features, as represented by ecosystems and landforms.

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

Balancing the geographic distribution of wilderness.

Manageability. This criterion evaluated if the area could be effectively managed to preserve its wilderness character.

Quality Standards

In addition to the planning criteria, a set of quality standards were developed to ensure consistency in evaluating the WSAs and 202 WSAs.

Energy and Mineral Resource Values. This quality standard considered any identified or potential energy and mineral resource values.

Impacts on Other Resources. This quality standard considered the extent to which other resource values or uses of the area would be forgone or adversely affected as a result of wilderness designation.

Impact of Nondesignation on Wilderness Values. This quality standard considered the alternative use of the land under study if the area is not designated as wilderness, and the extent to which the wilderness values of the area would be forgone or adversely affected as a result of this use.

Public Comment. This quality standard considered comments received from interested and affected public at all levels.

Local, Social, and Economic Effects. This quality standard gave special attention to adverse or favorable social and economic effects that designation of the area would have on local areas.

Consistency with Other Plans. This quality standard considered consistency with officially approved and adopted resource related plans of other federal agencies, state and local governments, and Indian tribes.

Formulation of Alternatives

Each of the two WSAs and two 202 WSAs were evaluated using the planning criteria and quality standards. Wilderness alternatives were identified and a comparison of the existing and potential losses or gains for various resources were made in the context of the overall RMP alternatives. From this comparison, preliminary recommendations were made for each WSA and 202 WSA, and incorporated in the RMP alternatives.

Evaluation of Environmental Consequences

The fourth step of the planning process was to analyze the environmental impacts of the alternatives. Based upon the analysis, the Preferred Alternative in the draft EIS was selected. The draft EIS documents for public review and comment the results of the assessment of impacts for the preferred and other alternatives for the WSAs and 202 WSAs.

WILDERNESS REPORTING

The reporting phase begins after the completion of the draft Resource Management Plan/EIS. A preliminary final EIS and Wilderness Study Report (WSR) will be prepared that address the results of the study and contain the preliminary wilderness recommendations. The report will summarize the planning documents, EIS, and the results of public participation.

All recommendations for areas found suitable for wilderness designation, which were studied under both Section 202 and Section 603 of FLPMA, and recommendations of WSAs found nonsuitable for wilderness designation, which were studied under Section 603, will be reported through the Director of the BLM, the Secretary of Interior, and the President, to Congress. Recommendations for lands found nonsuitable for wilderness designation that were studied under Section 202 of FLPMA will not be reported beyond the Director of the BLM.

The Federal Land Policy and Management Act requires the Secretary of the Interior to report the recommendations to the President by October 21, 1991. The President has until October 21, 1993, to send the recommendations to Congress, as only Congress can designate wilderness areas.

The BLM's *Interim Management Policy and Guidelines for Land Under Wilderness Review* (USDI, BLM 1983a) currently serves as the principle document for managing the Wales Creek WSA and Hoodoo Mountain WSA until Congress acts. The two former WSAs, Gallagher Creek and Quigg West, are protected only under multiple resource authority. The goal of the Interim Management Policy (IMP) is to ensure that the wilderness qualities of each WSA or 202 WSA are unchanged at the time Congress makes its final decisions.

THE ALTERNATIVE SELECTED

The RMP developed five major alternatives that projected different combinations of public land uses and management practices in response to the planning issues. Within these five major alternatives, an alternative was developed for each area being studied for wilderness. As required by the Wilderness Study Policy, an alternative for all wilderness, no wilderness, and no action was examined for each area being studied. For some of the areas being studied, there is more than one no wilderness alternative, because the overall goals of the different RMP alternatives would project different management for the areas not recommended for wilderness. In addition one alternative describes a partial wilderness option for some WSAs or 202 WSAs.

CHAPTER 2

ALTERNATIVES, INCLUDING THE PROPOSED ACTION

INTRODUCTION

Chapter 2 describes the alternatives considered for each WSA or 202 WSA. In addition, a table at the end of this chapter summarizes the environmental impacts of alternatives for each WSA or 202 WSA.

Two alternatives must be considered because of the Council of Environmental Quality (CEQ) Regulation 1502.14 and requirements of the BLM's *Wilderness Study Policy*. They are:

> The No Wilderness Alternative (No Action) which recommends that no part of the WSA or 202 WSA is suitable for wilderness designation. If Congress selects this alternative, multiple use management would continue without any wilderness constraints.
>
> The All Wilderness Alternative which recommends the entire WSA or 202 WSA as suitable for wilderness designation.

In addition to the required alternatives, one or more partial wilderness alternatives can also be considered. Partial wilderness alternatives allow portions of a WSA or 202 WSA to be recommended either suitable or nonsuitable. Two guidelines were used to arrive at the partial wilderness alternatives; to resolve conflicts between wilderness and other resource uses, and to improve the long-term wilderness manageability of the WSA.

Resource conflicts would arise when other uses reduce opportunities for solitude or primitive recreation or impair natural values. The manageability of a study area is affected by the locations and types of inholdings, valid existing rights, the presence of cherrystemmed or other segmenting roads, the presence of identifiable boundaries, the potential to remove unneeded manmade features, and the type and location of outside influences.

Alternatives Eliminated From Detailed Study

All areas being studied for wilderness in the resource area were evaluated against the criteria for formal identification as potential Areas of Critical Environmental Concern (ACECs). None of the areas meet the criteria; so this alternative was eliminated from detailed study.

These areas are proposed in this RMP for special management without formal designation to protect wildlife, watershed, and extensive recreation values. Management would be similar under either formal or informal designation and any of the designations could adequately protect the resources involved. It was decided that only one designation needed to be examined in detail through the planning process and that an administrative commitment for special protective management best safeguarded the specific values in need of protection in each area while permitting needed management flexibility. Therefore, the other designations; such as Outstanding Natural Areas, Research Natural Areas, etc.; were not carried forward and examined in detail. The special management designation would allow formal designation at a later date should the need or opportunity arise.

DESCRIPTION OF THE ALTERNATIVES, INCLUDING THE PROPOSED ACTION

Alternative A: No Action or Current Management

Under this alternative, none of the four areas being studied would be recommended as suitable for wilderness designation. However, 28,457 acres including all WSAs and 202 WSAs would be recommended for special management to safeguard identified wildlife, watershed, and recreation values. (See the Alternatives maps in the map packet.)

Alternative B

This alternative recommends no areas as suitable for wilderness designation. In addition, no areas would be recommended for any special designation or management. This alternative emphasizes intensive resource management over preservation of the identified wilderness values. If this alternative were selected, multiple use management would occur on the 27,737 acres.

Alternative C

All four areas, consisting of 27,737 acres, would be recommended as suitable for wilderness designation under this alternative. Preservation of identified wilderness values over the intensive management of other resources which are or may be present in the area would be emphasized.

Alternative D

This alternative recommends that all of Quigg West and portions of Wales Creek, Gallagher Creek, and Hoodoo Mountain (14,350 acres) be designated as wilderness. The remaining 13,387 acres would remain available for multiple use management.

Alternative E (Preferred Alternative)

Under this alternative the 520-acre Quigg West 202 WSA would be recommended suitable for wilderness provided that the adjacent 60,500-acre Quigg unit administered by the Forest Service is also recommended suitable for wilderness designation. In addition 7,600 acres of Wales Creek, Hoodoo Mountain, and Gallagher Creek would be committed to special management to safeguard wildlife, watershed, and extensive recreation values.

WILDERNESS MANAGEABILITY

The manageability of the WSAs and study areas varies according to the physical characteristics of each unit and according to the management alternative selected. A summary of the manageability determination for each area follows.

Wales Creek

Wales Creek would only be manageable under Alternative D. The existence of the 40 mining claims and two cherrystemmed roads would preclude successfully managing the area as wilderness under Alternative C.

Hoodoo Mountain

Hoodoo Mountain is considered manageable as wilderness only under Alternative C. The narrow neck of land in the WSAs configuration under Alternative D, directly adjacent to privately owned land, would be impossible to manage as wilderness if the adjoining private lands were developed. Even with Alternative C, boundaries set on ownership lines adjacent to private land rather than on identifiable topographic breaks could be unwittingly crossed by motorized vehicles with resultant adverse effects on solitude and naturalness.

Gallagher Creek

Gallagher Creek would not be manageable as wilderness under any alternative. Its small size and topographical limitations preclude adequate screening of offsite impacts.

Quigg West

Under no alternative would Quigg West be considered manageable by itself. Its 520-acre size is too small to permit the maintenance of wilderness values if any potentially adverse development were to occur near its boundaries. Conversely, as a part of the larger Forest Service unit, Quigg West would be manageable under Alternatives C, D, and E.

IMPACTS OF THE ALTERNATIVES

Table O-2 summarizes the management actions associated with each alternative. Table O-3 summarizes the impacts of each alternative on Wales Creek; Table O-4, Hoodoo Mountain; Table O-5 Gallagher Creek; and Table O-6 Quigg West.

SELECTION OF THE PREFERRED ALTERNATIVE

The preferred alternative for each area was selected through the BLMs multiple use planning process by applying the criteria and quality standards contained in the BLM's wilderness study policy. The preferred alternative of the RMP, Alternative E, recommends one area, Quigg West, consisting of 520 acres, as suitable for wilderness designation as long as the adjacent 60,500-acre Quigg unit administered by the Forest Service is found suitable for wilderness designation through the Forest Service's forest planning process. The preferred alternative also recommends that 7,600 acres extracted from Wales Creek, Hoodoo Mountain, and Gallagher Creek be specially managed to protect wildlife, watershed, and extensive recreation values. The remaining 19,617 acres would be returned to multiple use management.

RATIONALE

The rationale for the selection of the preferred alternative for each area is summarized in Table O-7. A detailed discussion of the rationale for each area is found below.

Wales Creek

Under the preferred alternative, Wales Creek is recommended as not suitable for wilderness designation. The two parallel roads in the center essentially bisect the WSA and adversely affect the naturalness and solitude values available in the center core. Motorized vehicle traffic occurs on both roads. In addition, wilderness designation would seriously conflict with identified timber values, with development of the 40 mining claims in the WSA, and with future mining operations in an area of moderate to high value deposits of metallic minerals. Wilderness designation would not benefit either the ecotype representation or the spatial distribution of the National Wilderness Preservation System (NWPS). Wilderness designation would limit a full range of big game habitat management opportunities and could lead to a seasonal reduction in game animal populations. Under the preferred alternative, the Wales Creek drainage would be given special management protection which would tend to safeguard some wilderness characteristics but would allow for greater management flexibility, especially in wildlife habitat management.

Hoodoo Mountain

Under the preferred alternative, Hoodoo Mountain is recommended as not suitable for wilderness designation. Wilderness designation would conflict with harvest of significant amounts of prime old-growth forest land. The lack of significant supplemental values in this WSA makes it less attractive as a wilderness. Likewise, the ecotypes found in this WSA are well-represented in the NWPS and the supply of wilderness in the region is adequate. Designation of Hoodoo Mountain would not benefit either the ecotype representation or the spatial distribution of the NWPS. As in Wales Creek, designation would limit a full range of big game habitat management opportunities and could lead to a seasonal reduction in elk populations. Under the preferred alternative, the upper Cottonwood Creek drainage (1,700 acres) would be given special management protection which would tend to safeguard some wilderness characteristics but would allow for greater management flexibility, especially of elk habitat.

Gallagher Creek

Under the preferred alternative, Gallagher Creek is recommended as not suitable for wilderness designation. Wilderness designation would conflict with harvest of significant amounts of prime old-growth forest land and optimal use of the range resources. The 202 WSA's small size and susceptibility to outside adverse impacts upon its solitude values makes it unmanageable as wilderness in the long term. Wilderness designation would not benefit either the ecotype representation or the spatial distribution of the NWPS. Wilderness designation would limit a full range of big game habitat management opportunities especially for elk and could lead to a seasonal reduction in game animal populations. Under the preferred alternative, the 1,000-acre western portion would be given special management protection which would tend to safeguard some wilderness characteristics but would allow for greater management flexibility, especially of elk habitat.

Quigg West

Under the preferred alternative, Quigg West is recommended for wilderness designation if the adjacent Forest Service RARE II unit, Quigg, is also recommended suitable for wilderness. This small tack-on, although it would not aid in the manageability or boundary configuration of the Forest Service unit, would significantly enhance the scenic quality, diversity, and wilderness quality of the adjoining Forest Service portion. In addition wilderness designation would best protect the bighorn sheep habitat found there.

TABLE 0-2
DESCRIPTION OF MANAGEMENT ACTIVITY BY ISSUE/BY ALTERNATIVE

ISSUE	ALTERNATIVE A — NO ACTION	ALTERNATIVE B
Wilderness Values	Wilderness values would be maintained when consistent with wildlife, watershed and dispersed recreation needs on 27,737 acres.	Wilderness values will not be emphasized; may be incidentally preserved to the extent that there is no conflict with development of other resources on 27,737 acres.
Road Construction	Roads will not be constructed.	Roads may be constructed for a variety of purposes, including minerals development, on all 27,737 acres.
Oil and Gas Leasing	Leases issued with stipulations prohibiting surface occupancy on approximately 27,737 acres.	Leases issued with standard stipulations on 27,737 acres.
Mining	Mining allowed on 27,737 acres. Withdrawal for some lands considered.	Mining allowed on 27,737 acres.
Recreation Use	Motorized vehicle use limited to existing roads and trails on all 27,737 acres; exceptions may be permitted for snowmobile use. No new recreation facilities will be built; two existing picnic sites at Hoodoo Mountain would continue to be used. About 12 miles of roads and trails would generally remain open to public.	Same as Alternative A. Additional roads would be developed and likely remain open at least seasonally for public use.
Cultural Resource Protection	Significant sites identified and managed for nonimpairment.	Same as Alternative A.
Timber Harvest	No timber harvest on 27,737 acres.	Timber may be harvested on all 27,737 acres.
Grazing Management	Permitted where established and consistent with goals for area.	All 27,737 acres would be available for livestock grazing.
Insect, forest disease and weed control	Herbicides and insecticides may be used on all 27,737 acres if consistent with management goals.	Herbicides and insecticides may be considered for use on all 27,737 acres.
Fire Control	All fires not fitting prescribed burn parameters will be suppressed on all 27,737 acres.	Same as Alternative A.

ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E – PREFERRED
Preserve wilderness values even if other resources cannot be developed on 27,737 acres.	Same as Alternative B on 13,387 acres. Same as Alternative C on 14,350 acres.	Same as Alternative B on 19,617 acres. Same as Alternative C on 520 acres.
No new roads will be constructed on 27,737 acres.	Same as Alternative B on 13,387 acres. Same as Alternative C on 14,350 acres.	Same as Alternative A on 8,120 acres. Same as Alternative B on 19,617 acres.
No new oil and gas leases will be issued on 27,737 acres.	Same as Alternative B on 13,387 acres except special stipulations incorporated. Same as Alternative C on 14,350 acres.	Same as Alternative A on 7,600 acres and 520 acres. 19,617 acres leased with special stips. Same as Alternative C on 520 acres. Same as Alterntive B on 19,617 acres.
Mining allowed subject to reasonable conditions to protect wilderness values on 800 acres of existing claims. Remainder of area withdrawn from mineral entry and development.	Same as Alternative B on 13,387 acres. No new claims on 14,350 acres.	Same as Alternative A on 7,600 acres. Same as Alternative B on 19,617 acres. Same as Alternative C on 520 acres.
All 27,737 acres closed to ORV use; no exception for snowmobile use. No recreation facilities will be built; two existing picnic sites at Hoodoo Mountain would continue to be used. About 7 miles of cherry stem road in Wales Creek remain open; 5.2 miles of vehicle ways closed.	14,350 acres closed to ORV use; ORV use on 13,387 acres limited to open roads and trails. No recreation facilities will be built; two existing picnic sites at Hoodoo Mountain would continue to be used. About 12 miles of roads and trails would generally remain open to public.	27,217 acres in a limited ORV use category. 520 acres closed. No recreation facility developments will be built; two existing picnic sites in Hoodoo Mtn. would continue to be used. About 12 miles of roads and trails would generally remain open to public.
Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
No timber harvest on 27,737 acres.	Harvest timber on 13,387 acres consistent with wildlife habitat management objectives. Same as Alternative C on 14,350 acres.	Same as Alternative A on 8,120 acres. Same as Alternative B on 19,617 acres.
Permitted where established prior to designation. New improvements can be constructed only when necessary to protect wilderness values.	Same as Alternative A on 13,387 acres. Same as Alternative C on 14,350 acres.	Same as Alternative A on 27,217 acres. Same as Alternative C on 520 acres.
Herbicides and insecticides will not be used on 27,737 acres.	Same as Alternative B on 13,387 acres. Same as Alternative C on 14,350 acres.	Same as Alternative A on 7,600 acres. Same as Alternative B on 19,617 acres. Same as Alternative C on 520 acres.
Fire suppression will be compatible with wilderness management objectives on 27,737 acres.	Same as Alternative A on 13,387 acres. Same as Alternative C on 14,350 acres.	Same as Alternative A on 27,217 acres. Same as Alternative C on 520 acres.

ISSUE	ALTERNATIVE A –	ALTERNATIVE B
Wildlife Habitat	Wildlife habitat improvement projects permitted on 27,737 acres if consistent with management goals.	Wildlife habitat improvement projects permitted on 27,737 acres.
Predator Control	No restriction on machine based hunting (vehicle and aircraft hunting allowed) but limited by terrain and lack of roads.	Same as Alternative A except additional access likely.
Economic Values	No emphasis on dollar return from resources because development is deferred.	Emphasis on resource development and use to receive highest dollar return on 27,737 acres.
Utility and Transportation Corridors	Restrictions on corridors on 27,737 acres.	No restrictions on corridors on 27,737 acres.

ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E —
Wildlife habitat improvement projects generally not permitted on 27,737 acres. Likely increase in wildlife habitat manipulation on areas immediately adjacent to wilderness areas would occur.	Same as Alternative A on 13,387 acres. Same as Alternative C on 14,350 acres.	Same as Alternative A on 27,217 acres. Same as Alternative C on 520 acres.
All vehicles and aircraft other than by Fish and Wildlife predator control unit would be prohibited.	Same as Alternative A on 13,387 acres. Same as Alternative C on 14,350 acres.	Same as Alternative A on 27,217 acres. Same as Alternative C on 520 acres.
No emphasis on dollar return from resources. Resource developed only when wilderness values can be enhanced or preserved on 27,737 acres.	Emphasis is on resource use with wildlife habitat objectives on 13,387 acres. Same as Alternative C on 14,350 acres.	No emphasis on dollar return from 8,120 acres. Emphasis is on resource use consistent with wildlife habitat objectives on 19,617 acres. Preserve basic undeveloped status on 7,600 acres.
Exclusion of corridors on 27,737 acres.	Same as Alternative B on 13,387 acres. Same as Alternative C on 14,350 acres.	Same as Alternative A on 7,600 acres. Same as Alternative B on 19,617 acres. Same as Alternative C on 520 acres.

TABLE 0-3

SUMMARY OF IMPACTS OF EACH ALTERNATIVE ON WALES CREEK WSA

ISSUE	ALTERNATIVE A	ALTERNATIVE B
Wilderness	Special management protects wilderness values in short term on 11,500 acres.	Potential short and long-term loss of naturalness and solitude on 11,580 acres.
Soil and Water	Surface disturbance with concurrent impacts on wilderness possible in long term if in accordance with special management goals. If in accordance with special management goals, surface disturbance would adversely affect sedimentation and water in creeks.	Surface disturbance would adversely affect water quality, sedimentation, and hot springs resource.
Energy and Minerals	Exploration and development somewhat restricted by special management on 11,580 acres.	No impact.
Lands	Possible corridor routes restricted by special management on 11,580 acres.	No impact.
Recreation	Some increase in primitive recreation opportunities. Some impact on scenery and specific sites if surface disturbance allowed on 11,580 acres.	Decrease in opportunities for primitive recreation and increase in motorized recreation on 11,580 acres.
Cultural	Some disturbance of cultural values possible if surface disturbance allowed. Activity stimulates discovery of cultural sites on 11,580 acres.	Greater disturbance of cultural values possible. More opportunity to discover cultural sites on 11,580 acres.
Visual	If surface disturbance allowed, changes possible in landscape.	Short and long-term evident change in the landscape.
Forest Resources	CFL on 10,850 acres not available for harvest.	789 mbf annual harvest. Timely control of forest insects and diseases.
Range	118 potential AUMs would not be available for livestock use. Special management would maintain or improve habitat on 11,580 acres.	121 AUMs would be available for livestock use.
Wildlife and Fisheries	If surface disturbance allowed, potential for habitat destruction. No economic gains from 118 potential AUMs and 789 mbf timber harvest.	Wildlife on 11,580 acres possibly displaced. Short-term impacts to fisheries habitat caused by road construction.
Socioeconomic	Income from mining and oil and gas leasing decreased on 11,380 acres.	7 primary jobs and some secondary jobs created in forest products industry. Increase in ranching, mining, and timber industries income.

ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Wilderness qualities best preserved on 11,580 acres. Due to 40 mining claims and 2 roads, area not manageable with this alternative.	Same as Alternative C on 4,900 acres and same as Alternative B on 6,680 acres. 4,900 acres are manageable for wilderness.	Same as Alternative A on 4,900 acres and same as Alternative B on 6,680 acres.
Resources best protected from surface disturbance with this alternative.	Short-term increases in sedimentation in streams on 6,680 acres. Same as Alternative C on 4,900 acres.	Same as Alternative A on 4,900 acres and same as Alternative B on 6,680 acres.
New mineral entry or lease prohibited. Existing 40 claims and oil and gas leases honored. Loss of 11,580 acres of moderate to high value metallic mineral resource.	Loss of 4,900 acres of moderate value metallic mineral resource.	Loss of 4,900 acres of moderate value metallic mineral resource. Special stipulations on 6,680 acres.
Long-term decrease in possible corridor routes on 11,580 acres.	Long-term decrease in possible corridor routes on 4,900 acres.	Possible corridor routes restricted by special management on 4,900 acres.
One mile of road closure causes loss of motorized recreation. Number of visitors likely to remain the same. Enhanced opportunity for nonmotorized recreation on 11,580 acres.	Same as Alternative C on 4,900 acres and same as Alternative B on 6,680 acres.	Same as Alternative A on 4,900 acres and same as Alternative B on 6,680 acres.
Less surface disturbance means less cultural site disturbance. Possibly some site disturbance by recreationists.	Same as Alternative C on 4,900 acres and same as Alternative B on 6,680 acres.	Same as Alternative A on 4,900 acres and same as Alternative B on 6,680 acres.
No impact. CFL on 10,850 acres not available for harvest.	No impact on 4,900 acres. Same as Alternative B on 6,680 acres. Annual harvest reduced by 489 mbf by wilderness on 4,900 acres.	No impact on 4,900 acres. Same as Alternative B on 6,680 acres. Annual harvest reduced by 489 mbf by special management on 4,900 acres.
Same as Alternative A.	118 potential AUMs would not be available for livestock use.	118 potential AUMs would not be available for livestock use.
Seasonal shift of elk, deer and moose away from area to utilize food made available by management on adjacent lands. Greater number of animals in area during hunting season.	Same as Alternative C on 4,900 acres and same as Alternative B on 6,680 acres.	Same as Alternative A on 4,900 acres and same as Alternative B on 6,680 acres.
No economic gains from 118 potential AUMs, 789 mbf harvested, and mineral activity on 11,580 acres. Insignificant loss of recreation income from closure of 1 mile of road.	Economic gains from 350 mbf and 40 mining claims. 4 primary and some secondary forest products jobs created. Income from 118 AUMs not available.	Economic gains from 350 mbf and 40 mining claims. 4 primary and some secondary forest products jobs created. Income from 118 AUMs not available.

TABLE 0-4
SUMMARY OF IMPACTS OF EACH ALTERNATIVE ON HOODOO MOUNTAIN WSA

ISSUE	ALTERNATIVE A	ALTERNATIVE B
Wilderness	Special management protects wilderness values in short term on 11,380 acres. Surface disturbance with concurrent impacts on wilderness possible in long term if in accordance with special management goals.	Potential short and long-term loss of naturalness and solitude on 11,380 acres.
Soil and Water	If in accordance with special management goals, surface disturbance would adversely affect sedimentation and water in creeks.	Surface disturbance would adversely affect water quality and sedimentation especially in the wet areas of Cottonwood Meadows.
Energy and Minerals	Exploration and development somewhat restricted by special management on 11,380 acres.	No impact.
Lands	Possible corridor routes restricted by special management on 11,380 acres.	No impact.
Recreation	Some increase in primitive recreation opportunities. Some impact on scenery and specific sites if surface disturbance allowed on 11,380 acres.	Decrease in opportunities for primitive recreation and increase in motorized recreation on 11,380 acres.
Cultural	Some disturbance of cultural values possible if surface disturbance allowed. Activity stimulates discovery of cultural sites on 11,380 acres.	Greater disturbance of cultural values possible. More opportunity to discover cultural sites on 11,380 acres.
Visual	If surface disturbance allowed, changes possible in landscape.	Short and long-term evident change in the landscape.
Forest Resources	CFL on 9,078 acres not available for harvest.	635 mbf annual harvest. Timely control of forest insects and diseases.
Range	39 potential AUMs would not be available for livestock use.	184 AUMs would be available for livestock use.
Wildlife and Fisheries	Special management would maintain or improve habitat on 11,380 acres. If surface disturbance allowed, potential for habitat destruction.	Wildlife on 11,380 acres possibly displaced. Short-term impacts to fisheries habitat caused by road construction.
Socioeconomic	No economic gains from 39 potential AUMs and 635 mbf timber harvest. Income from mining and oil and gas leasing decreased on 11,380 acres.	6 primary jobs and some secondary jobs created in forest products industry. Increase in ranching, mining and timber industries income.

ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Wilderness qualities best preserved on 11,380 acres. Area is manageable with this alternative.	Same as Alternative C on 5,873 acres and same as Alternative B on 5,507 acres. Area not developed if adjoining private lands developed.	Same as Alternative A on 1,700 acres and same as Alternative B on 9,680 acres.
Resources best protected from surface disturbance with this alternative.	Short-term increases in sedimentation in streams on 5,507 acres. Same as Alternative C on 5,873 acres.	Same as Alternative A on 1,700 acres and same as Alternative B on 9,680 acres.
New mineral entry or lease prohibited. Existing oil and gas leases honored. Loss of 11,380 acres of low to moderate value metallic mineral resource.	Loss of 5,873 acres of low to moderate value metallic mineral resource.	Loss of 1,700 acres of low to moderate value metallic mineral resource. Special stipulations on 9,680 acres.
Long-term decrease in possible corridor routes on 11,380 acres.	Long-term decrease in possible corridor routes on 5,873 acres.	Possible corridor routes restricted by special management on 1,700 acres.
4.1 miles of road closure cause loss of motorized recreation. Number of visitors likely to remain the same. Enhanced opportunity for nonmotorized recreation on 11,380 acres.	Same as Alternative C on 5,873 acres and same as Alternative B on 5,507 acres.	Same as Alternative A on 1,700 acres and same as Alternative B on 9,680 acres.
Less surface disturbance means less cultural site disturbance. Possibly some site disturbance by recreationists.	Same as Alternative C on 5,873 acres and same as Alternative B on 5,507 acres.	Same as Alternative A on 1,700 acres and same as Alternative B on 9,680 acres.
No impact.	No impact on 5,873 acres. Same as Alternative B on 5,507 acres.	No impact on 1,700 acres. Same as Alternative B on 9,680 acres.
CFL on 9,078 acres not available for harvest.	Annual harvest reduced by wilderness on 5,873 acres.	Annual harvest reduced by special management on 1,700 acres.
Same as Alternative A.	39 potential AUMs would not be available for livestock use.	39 potential AUMs would not be available for livestock use.
Seasonal shift of elk and deer away from area to utilize food made available by management on adjacent lands. Greater number of animals in area during hunting season.	Same as Alternative C on 5,873 acres and same as Alternative B on 5,507 acres.	Same as Alternative A on 1,700 acres and same as Alternative B on 9,680 acres.
No economic gains from 39 potential AUMs, 635 mbf harvested, and mineral activity on 11,380 acres. Insignificant loss of recreation income from closure of 4.1 miles of roads.	Economic gains from oil and gas leasing and mining. 4 primary and some secondary forest products jobs created. Income from 39 AUMs not available.	Economic gains from forest harvest, oil and gas leasing and mining. 5 primary and some secondary forest products jobs created. Income from 39 AUMs not available.

TABLE 0-5

SUMMARY OF IMPACTS OF EACH ALTERNATIVE ON GALLAGHER CREEK 202 WSA

ISSUE	ALTERNATIVE A	ALTERNATIVE B
Wilderness	Special management protects wilderness values in short term on 4,257 acres. Surface disturbance with concurrent impacts on wilderness possible in long term if in accordance with special management goals.	Potential short and long term loss of naturalness and solitude on 4,257 acres.
Soil and Water	If in accordance with special management goals, surface disturbance would adversely affect sedimentation and water in creeks.	Surface disturbance would adversely affect water quality and sedimentation.
Energy and Minerals	Exploration and development somewhat restricted by special management on 4,257 acres.	No impact.
Lands	Possible corridor routes restricted by special management on 4,257 acres.	No impact.
Recreation	Some increase in primitive recreation opportunities. Some impact on scenery and specific sites if surface disturbance allowed on 4,257 acres.	Decrease in opportunities for primitive recreation and increase in motorized recreation on 4,257 acres.
Cultural	Some disturbance of cultural values possible if surface disturbance allowed. Activity stimulates discovery of cultural sites on 4,257 acres.	Greater disturbance of cultural values possible. More opportunity to discover cultural sites on 4,257 acres.
Visual	If surface disturbance allowed, changes possible in landscape.	Short and long-term evident change in the landscape.
Forest Resources	CFL on 3,274 acres not available for harvest.	249 mbf annual harvest. Timely control of forest insects and diseases.
Range	154 potential AUMs would not be available for livestock use.	154 AUMs would be available for livestock use.
Wildlife and Fisheries	Special management would maintain or improve habitat on 4,257 acres. If surface disturbance allowed, potential for habitat destruction.	Wildlife on 4,257 acres possibly displaced. Short-term impacts to fisheries habitat caused by road construction.
Socioeconomic	No economic gains from 154 potential AUMs and 249 mbf timber harvest. Income from mining and oil and gas leasing decreased on 4,257 acres.	3 primary jobs and some secondary jobs created in forest products industry. Increase in ranching, mining, and timber industries income.

ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Wilderness qualities best preserved on 4,257 acres. Due to small size and topographical limitations, area not manageable for this alternative.	Same as Alternative C on 3,577 acres and same as Alternative B on 680 acres. The area would not be manageable as wilderness due to small size and topographical limitations.	Same as Alternative A on 1,000 acres and same as Alternative B on 3,257 acres.
Resources best protected from surface disturbance with this alternative.	Short-term increases in sedimentation in streams on 680 acres. Same as Alternative C on 3,577 acres.	Same as Alternative A on 1,000 acres and same as Alternative B on 3,257 acres.
New mineral entry or lease prohibited. Existing oil and gas leases honored. Loss of 4,257 acres of low value metallic mineral resource.	Loss of 3,577 acres of low to moderate value metallic mineral resource.	Loss of 1,000 acres of low value metallic mineral resource. Special stipulations on 3,257 acres.
Long-term decrease in possible corridor routes on 4,257 acres.	Long term decrease in possible corridor routes on 3,577 acres.	Possible corridor routes restricted by special management on 1,000 acres.
Slight loss of opportunity for motorized recreation. Number of visitors likely to remain the same. Enhanced opportunity for nonmotorized recreation on 4,257 acres.	Same as Alternative C on 3,577 acres and same as Alternative B on 680 acres.	Same as Alternative A on 1,000 acres and same as Alternative B on 3,257 acres.
Less surface disturbance means less cultural site disturbance. Possibly some site disturbance by recreationists.	Same as Alternative C on 3,577 acres and same as Alternative B on 680 acres.	Same as Alternative A on 1,000 acres and same as Alternative B on 3,257 acres.
No impact.	No impact on 3,577 acres. Same as Alternative B on 680 acres.	No impact on 1,000 acres. Same as Alternative B on 3,257 acres.
CFL on 3,274 acres not available for harvest.	Annual harvest reduced by wilderness on 3,577 acres.	Annual harvest reduced by special management on 1,000 acres.
Same as Alternative A. Seasonal shift of elk and deer away from area to utilize food made available by management on adjacent lands. Greater number of animals in area during hunting season.	154 potential AUMs would not be available for livestock use. Same as Alternative C on 3,577 acres and same as Alternative B on 680 acres.	154 potential AUMs would not be available for livestock use. Same as Alternative A on 1,000 acres and same as Alternative B on 3,257 acres.
No economic gains from 154 potential AUMs, 249 mbf harvested, and mineral activity on 4,257 acres. Insignificant loss of recreation income dependent on motorized vehicles.	Economic gains from oil and gas leasing and mining. No primary or secondary forest products jobs created. No income from 154 AUMs.	Economic gains from forest harvest, oil and gas leasing, and mining. Some primary and some secondary forest products jobs created. Income from 118 AUMs not available.

TABLE 0-6

SUMMARY OF IMPACTS OF EACH ALTERNATIVE ON QUIGG WEST 202 WSA

ISSUE	ALTERNATIVE A	ALTERNATIVE B
Wilderness	Special management protects wilderness values in short term on 520 acres. Surface disturbance with concurrent impacts on wilderness possible in long term if in accordance with special management goals.	Potential short and long-term loss of naturalness and solitude on 520 acres.
Soil and Water	If in accordance with special management goals, surface disturbance would adversely affect sedimentation and water in creeks.	Surface disturbance would adversely affect water quality and sedimentation.
Energy and Minerals	Exploration and development somewhat restricted by special management on 520 acres.	No impact.
Lands	Possible corridor routes restricted by special management on 520 acres.	No impact.
Recreation	Some increase in primitive recreation opportunities. Some impact on scenery and specific sites if surface disturbance allowed on 520 acres.	Decrease in opportunities for primitive recreation and increase in motorized recreation on 520 acres.
Cultural	Some disturbance of cultural values possible if surface disturbance allowed. Activity stimulates discovery of cultural sites on 520 acres.	Greater disturbance of cultural values possible. More opportunity to discover cultural sites on 520 acres.
Visual	If surface disturbance allowed, changes possible in landscape.	Short and long-term evident change in the landscape.
Forest Resources	CFL on 284 acres not available for harvest.	15 mbf annual harvest. Timely control of forest insects and diseases.
Range	20 potential AUMs would not be available for livestock use.	20 AUMs would be available for livestock use.
Wildlife and Fisheries	Special management would maintain or improve habitat on 520 acres. If surface disturbance allowed, potential for habitat destruction and displacement of Bighorn sheep herd.	Wildlife on 520 acres possibly displaced. Short-term impacts to fisheries habitat caused by road construction. Probable loss of Bighorn sheep herd.
Socioeconomic	No economic gains from 20 potential AUMs and 15 mbf timber harvest. Income from oil and gas leasing decreased on 520 acres.	Some primary jobs and some secondary jobs created in forest products industry. Increase in ranching, mining, and timber industries income.

ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E
Wilderness qualities best preserved on 520 acres. Area is not manageable by itself, only manageable in conjunction with adjacent FS RARE II area.	Wilderness qualities best preserved on 520 acres. Area is not manageable by itself, only manageable in conjunction with adjacent FS RARE II area.	Wilderness qualities best preserved on 520 acres. Area is not manageable by itself, only manageable in conjunction with adjacent FS RARE II area.
Resources best protected from surface disturbance with this alternative.	Resources best protected from surface disturbance with this alternative.	Resources best protected from surface disturbance with this alternative.
New mineral entry or lease prohibited. Existing oil and gas leases honored. Loss of 520 acres of moderate value metallic mineral resource.	New mineral entry or lease prohibited. Existing oil and gas leases honored. Loss of 520 acres of moderate value metallic mineral resource.	New mineral entry or lease prohibited. Existing oil and gas leases honored. Loss of 520 acres of moderate value metallic mineral resource.
Long-term decrease in possible corridor routes on 520 acres.	Long-term decrease in possible corridor routes on 520 acres.	Long-term decrease in possible corridor routes on 520 acres.
Area sees no motorized recreation uses. No impact on motorized recreation. Number of visitors likely to remain the same. Enhanced opportunity for nonmotorized recreation on 520 acres.	Area sees no motorized recreation uses. No impact on motorized recreation. Number of visitors likely to remain the same. Enhanced opportunity for nonmotorized recreation on 520 acres.	Area sees no motorized recreation uses. No impact on motorized recreation. Number of visitors likely to remain the same. Enhanced opportunity for nonmotorized recreation on 520 acres.
Less surface disturbance means less cultural site disturbance. Possibly some site disturbance by recreationists.	Less surface disturbance means less cultural site disturbance. Possibly some site disturbance by recreationists.	Less surface disturbance means less cultural site disturbance. Possibly some site disturbance by recreationists.
No impact.	No impact.	No impact.
CFL on 284 acres not available for harvest.	CFL on 284 acres not available for harvest.	CFL on 284 acres not available for harvest.
Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Best protection for Bighorn sheep. Seasonal shift of elk and deer away from area to utilize food made available by management of adjacent lands.	Best protection for Bighorn sheep. Seasonal shift of elk and deer away from area to utilize food made available by management of adjacent lands.	Best protection for Bighorn sheep. Seasonal shift of elk and deer away from area to utilize food made available by management of adjacent lands.
No economic gains from 20 potential AUMs, 15 mbf harvested, and mineral activity on 520 acres. No loss of recreation income.	No economic gains from 20 potential AUMs, 15 mbf harvested, and mineral activity on 520 acres. No loss of recreation income.	No economic gains from 20 potential AUMs, 15 mbf harvested, and mineral activity on 520 acres. No loss of recreation income.

TABLE O-7

SUMMARY OF THE RATIONALE FOR THE SELECTION OF THE PREFERRED ALTERNATIVE FOR THE GARNET RESOURCE AREA WILDERNESS EIS

Area	Preferred Alternative	Rationale
Wales Creek	Nonsuitable for wilderness designation, special management for Wales Creek drainage.	The two roads in the center of the WSA make management as wilderness difficult. Conflict with identified mining values, timber values, and with wildlife management goals. No advantage to NWPS. Protection of some wilderness values through special management which gives more management flexibility.
Hoodoo Mountain	Nonsuitable for wilderness designation, special management for upper portion of Cottonwood Creek drainage.	Conflict with timber values and with wildlife management goals. No advantage to NWPS. Nothing of supplemental value significance in the WSA. Protection of some wilderness values through special management which gives more management flexibility.
Gallagher Creek	Nonsuitable for wilderness designation, special management for western portion of area.	The 202 WSA's small size would make management as wilderness difficult. No advantage to NWPS. Conflict with timber and range values. Protection of some wilderness values through special management which gives more management flexibility.
Quigg West	Suitable for wilderness designation in conjunction with adjacent FS Quigg RARE II unit.	Tack-on would enhance diversity, scenic quality, and wilderness quality of adjoining FS unit. Designation would protect bighorn sheep population.

CHAPTER 3

AFFECTED ENVIRONMENT

WALES CREEK WSA (MT-074-150)

General Description

The Wales Creek WSA is located in Powell County approximately 40 miles due east of Missoula, Montana in the Garnet Range. There are no state or other federal lands within the WSA. However, several cherrystemmed roads project into it. Boundaries are formed by private, state, and other BLM lands.

Wilderness Resources

Size

The Wales Creek WSA contains 11,580 acres of public lands.

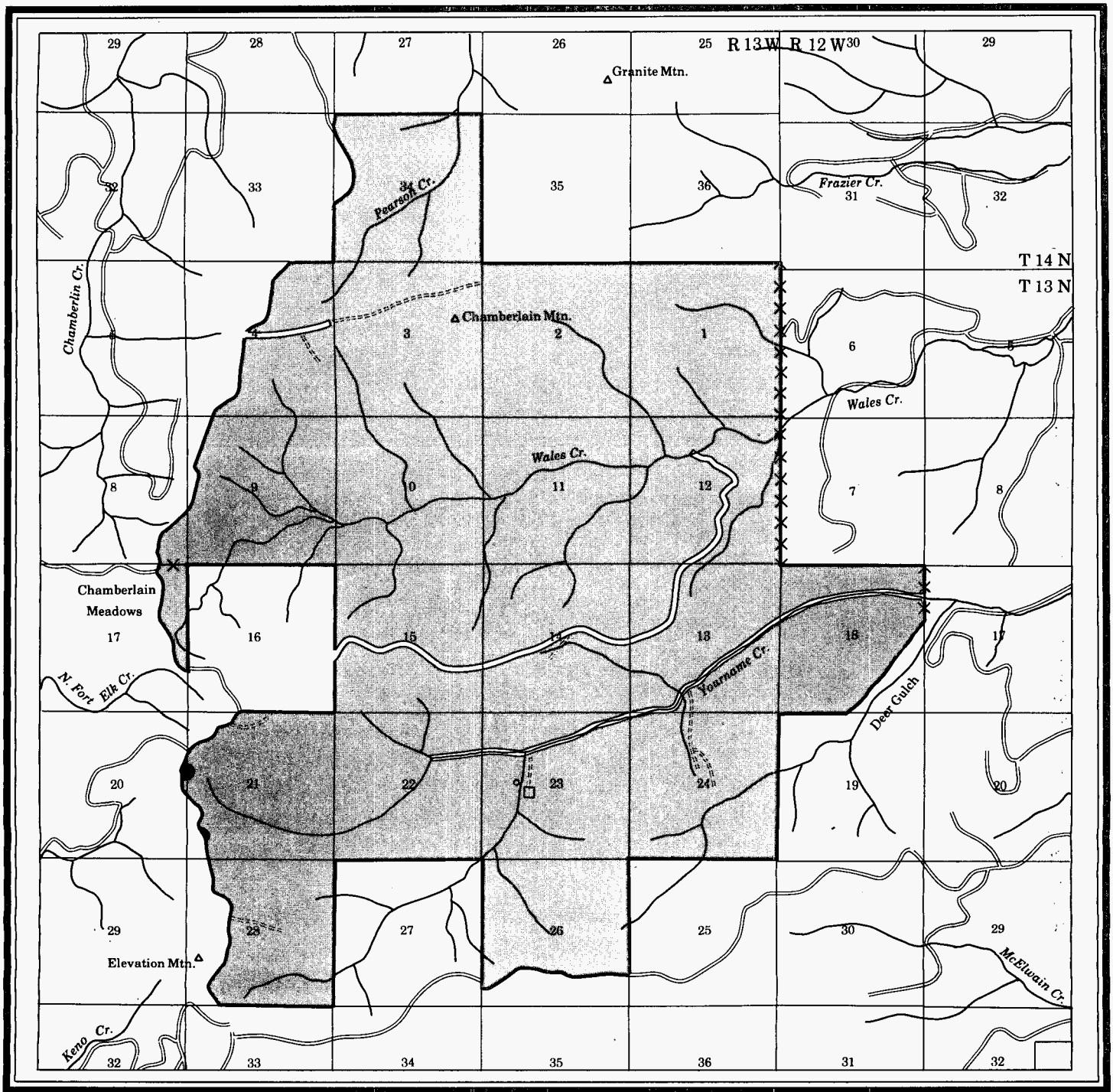
Naturalness

Wales Creek WSA encompasses the last major unroaded drainage in the western Garnet Range. Wales Creek WSA is surrounded by extensive logging and development, yet it gives the visitor the impression of being an untouched wilderness.

The few minor traces of human activities detailed in Table O-8 and the Wales Creek WSA Impacts map are largely of minor significance. These include vehicle ways, traces of historic mining, and an early 1970's tree thinning project adjacent to the western boundary road. The two significant signs of human presence include the Wales Creek fire road and the Yourname Creek Road, which are found a half mile away from each other extending through the middle of the WSA. These two roads adversely affect the wilderness experience of visitors expecting to find a natural appearing area and effectively bisect the WSA into two parts. The vast majority of the WSA, however, contains no evidence of human influence. None of the human imprints, either by themselves or cumulatively, would have an overriding effect on the naturalness of the WSA.

TABLE O-8
EFFECTS ON NATURALNESS
WALES CREEK WSA

Feature	Legal Location	Length/Area	Impact	Remarks
Wales Cr. Fire Rd.	T13N, R13W Sec. 12,14,15	Approx. 3.3 mi.	High	This road is a cherrystem entering the WSA
Yourname Cr. Rd.	T13N, R12W, Sec. 17,18; T13N, R13W, Sec. 13,22,23	Approx. 3.6 mi.	High	Road is cherrystem entering the WSA
Vehicle Way off Elevation Mtn. Rd.	T13N, R13W, Sec. 21, NW¼	Approx. 1/2 mi.	Low	Vehicle Way off Wales Cr. Rd.
	T13N, R13W, Sec. 14, SW¼	Approx. 125 yds.	Low	Leads to developed spring
Vehicle Way off Elevation Mtn. Rd.	T13N, R13W, Sec. 28, N½	1/4 mi.	Low	
Thinnings (2)	T13N, R13W, Sec. 21	Under 1 ac.	Low	Substantially revegetated
Old fire line	T13N, R13W, Sec. 13,24	Approx. 1/2 mi.	Low	Visible from the air
Spur to cabin at head of Yourname	T13N, R13W, Sec. 22	1/8 mi.	Low	Leads to old mining operation
Old cabin	T13N, R13W, Sec. 22	Under 1 ac.	Low	Partially collapsed
Prospect hole (assoc. with old cabin)	T13N, R13W, Sec. 22	Under 1 ac.	Low	
Developed spring	T13N, R13W Sec. 14	Under 1 ac.	Low	Developed for cattle
Line fence	T13N, R13W, Sec. 25	Approx. 1/4 mi.		
Chamberlain Mtn. Rd.	T13N, R13W, Sec. 3,4	Approx. 1¾ mi.		Cherrystemmed for about 3/4 mi.



WSA Boundary

Fence

Cabin

Prospect Hole

Thinning Area

Vehicle Way

WALES CREEK IMPACTS

NORTH

0 1 2 Miles

0 1 2 3 Kilometers

1:63,360

Outstanding Opportunities

The WSA is made up of two creek drainages and the bordering forested ridges. In the Wales Creek drainage numerous winding side drainages, combined with dense stands of lodgepole pine, spruce, Douglas-fir, larch, subalpine fir, and aspen provide outstanding opportunities for visitors to be physically and visually separated from one another.

Although the Yourname Creek drainage does not contain the high number of side drainages that Wales Creek does, the dense lodgepole pine stands in the drainage act as an excellent screening device to hide visitors from one another.

The rectangular configuration and two to three-mile core-to-perimeter distance of the WSA adds to the vegetative screening to enhance solitude values.

From several high points, such as Chamberlain Mountain, the visitor can look out and see signs of human activities such as towns, logging, mining, etc. These sights are unavoidable, but they do not seriously interfere with the opportunity to find solitude. From the vantage points, the visitor also can look out over the unroaded expanse of the drainages; and once in these drainages, these human activities are hidden both from sight and, for the most part, sound.

Vehicle traffic on the Wales Creek fire road and on Yourname Creek road, especially during autumn hunting season, is noticeable near those roads. On the whole, however, the Wales Creek WSA provides outstanding opportunities for solitude.

The major recreational use is big game hunting. The WSA supports a moose herd of about 25 to 30 animals as well as a substantial elk herd.

Because it is the last major unroaded area in the Garnet Range, the WSA has particular value for the roadless hunting experience it affords. Associated with the hunting opportunities are opportunities for wildlife viewing and wildlife photography.

The opportunities are somewhat limited for cross-country skiing day use because of poor winter access, but the potential is excellent for extended trips on either cross-country skis or snowshoes. While the thermal springs are year-round attractions, they have particular appeal for the winter traveler.

In summary, because of its size, ruggedness, and other physical characteristics; the Wales Creek WSA provides outstanding opportunities for primitive and unconfined recreation both through the diversity of available opportunities and the quality hunting.

Supplemental Values

The WSA contains at least four locations in the Wales Creek drainage where hot or warm springs are known to exist. These thermal springs were used by the miners in the past for recreational purposes.

The outstanding wildlife values are considered a supplemental value. It provides seasonal range for moose, elk, and deer. The WSA is used for nesting by goshawks, a Montana species of special interest or concern.

Wales Creek WSA comprises the last major unroaded drainages in the western Garnet Mountains and as such acquires some scarcity value in this heavily logged region of the country. Some of the old buildings, building remains, and mining activity may have historical significance.

Ecosystem Representation

The WSA consists of three different ecotypes as defined by Bailey and Kuchler (Kuchler 1964; USDA, FS 1976, 1978a, 1978b). Douglas-fir forest makes up 38 percent of the WSA; western spruce and fir forest, 56 percent; and alpine meadows and barren, 6 percent. (See Appendix Q for a description of these ecosystems.) All of these ecotypes are well represented in existing wilderness areas.

Wales Creek lies in an area where vast national forest lands have been designated as wilderness. Several more areas have been recommended for wilderness. (See Appendix P for a listing of these areas.)

Summary of Wilderness Quality

Wales Creek provides the wilderness visitor with a natural appearing area replete with opportunities for solitude and primitive recreation. The WSA also offers a diverse array of supplemental values. The dividing roads in the center adversely affect solitude values in that portion of the WSA and are a limiting factor.

Soil and Water Resources

The Wales Creek drainage, which is almost entirely on granodiorite bedrock, has extensive wet riparian areas and hot springs. The nature and extent of these wet areas, in conjunction with highly erosive soils, is indicative of a drainage that is highly susceptible to soil erosion and water quality problems unless extreme care is used in development activities.

Water quality data is nonexistent for Wales Creek, Yourname Creek, Deer Gulch, and Pearson Creek, the four streams which drain the WSA. As these watersheds are essentially undisturbed, water quality is expected to be high.

Belt series rock (4,500 acres), tertiary age andesite and granodiorite (3,100 acres and 4,200 acres respectively), and limestone (200 acres) occur in this WSA.

Soils formed in andesitic materials have moderate to strongly developed subhorizons. Potential soil compaction, erosion, and gully formation is moderate to severe. Where gravel content is greater than 35 percent, the forgoing problems are much less severe.

Soils formed in granodiorite usually have very weakly developed subhorizons. These soils are highly erosive when exposed, particularly at slopes greater than 15 percent. Areas of cliffs and talus are present especially on granodiorite bedrock.

Soils formed in tertiary age rhyolite have weakly developed subhorizons with low clay and high gravel content in the profile. These soils are generally stable for most uses.

Soils formed in Belt series rock and limestone generally have weakly developed subhorizons with a high gravel content. These soils are very stable with a low erosion and compaction potential.

Energy and Minerals

Wales Creek WSA is in the Montana Overthrust Belt. Bedrock consists of a thick series of old sedimentary rocks which are folded and faulted. Plutons of igneous rocks intrude the older units. Young volcanic rocks, primarily lava, cover large parts of the WSA. Prospects and mineral occurrences are common in Yourname Creek, and there are active gold placer operations just southwest of the WSA. Forty unpatented claims are within or adjacent to the Wales Creek WSA. All are located in Yourname Creek drainage. Under the 3802 Regulations, unpatented mining claims are regulated to prevent impairment, which would make the area unsuitable for wilderness designation.

One hundred percent of the Wales Creek WSA is either under oil and gas application or lease. Leased lands have special stipulations attached regarding nondegradation of the wilderness study areas, and those under application will not be leased under the present leasing moratorium in WSAs.

The Wales Creek WSA is estimated to have high to moderate potential for metallic mineral resources. This classification is strongly supported by abundant mineral occurrences and geochemical anomalies. The potential for other resources is considered low.

Lands

The Northern Tier Pipeline made application for a right-of-way over public lands in 1977. Among the alternative routes proposed, one passed through the Wales Creek drainage. As a result, the wilderness inventory for the Wales Creek WSA was accelerated.

The draft EIS for the pipeline was issued in January 1979, and public comment gathered on the alternative routes. The alternative that passed through Wales Creek was modified to pass just south of the WSA and adopted as the preferred alternative of the final EIS. In 1983, the Northern Tier project was abandoned.

The BLM intends, as part of its land adjustment process, to trade public lands for the state owned section in T. 13 N., R. 13 W., Sec. 16. This would be initiated whether or not the area is recommeded for wilderness designation.

Recreation Resources

The quality of recreational opportunities is high in this WSA. The landforms are interesting and provide a scenic backdrop that enhances most dispersed recreational activities. Wales Creek's rough topography also provides excellent photographic opportunities from several viewpoints. The WSA offers opportunities for nature study, horseback riding, hiking, camping, fishing, snowmobiling, nature study, photography, and cross-country skiing. Geothermal springs in the Wales Creek drainage attract visitors to their warm waters.

The dominant use of the WSA is for big game hunting. The Wales Creek WSA is part of a continuous belt of walk-in hunting areas from Chamberlain Creek on the north to Murray and Douglas creeks on the south. Included are the Blackfoot Special Management Area, the Wales/Pearson Creek area, and the Yourname/McElwain/Douglas Creek area. Collectively these areas contain over 66,000 acres of which 26,700 acres are public land.

Motorized vehicle use is light and restricted to existing vehicle ways and roads. There are no recreation facilities or vehicle way closures in this WSA (except for 1/4 mile of the Wales Creek Road). Access is limited because of the lack of roads.

Recreation use, except for hunting, is light because of its remoteness and the absence of an internal trail system. The best professional estimate of BLM recreation planners indicates that 500 visitors per year use the WSA. The WSA receives a great deal of fall use by hunters and probably 75 percent of use or 375 visitors per year are hunting related.

Visual Resources

Wales Creek WSA is classified in VRM Class I (see Appendix F).

Cultural Resources

The core of the Wales Creek WSA has not been systematically examined for cultural resources. However, information can be derived from inventory of similar environments and applied to this WSA.

Prehistoric utilization of the Wales Creek WSA and other portions of the Garnet Range has occurred for at least the last 10,000 years. The high, rugged mountain and forested character of the Garnets effectively limits human use from the late spring to the early fall. Prehistoric sites found to date focus on areas with high concentrations of resources. These include basalt lithic sources, open meadows and forest with high forb and big game populations, and perennial water sources.

Due to its location and the abundant pockets of concentrated resources, Wales Creek would provide an excellent study area for testing hypotheses on Late Paleo Indian and Early Middle Period subsistance patterns. The patterns of prehistoric use along the hot springs in Wales Creek offers another topic for investigation.

Historic use of the wilderness study area occurred in waves. One gunflint recovered from the WSA may come from the Fur Trade Period or historic Native American hunting activities. The discovery of gold within and southwest of the WSA in 1865 provided the greatest impetus for historic use and occupation. The community of Top O'Deep was established near the study boundary. Portions of Douglas Creek and Yourname Creek were also mined. Placer mining in the other drainages occurred in 1895-1915 and 1932-1942. The Wales Creek hot springs have been used recreationally throughout the historical period, and historical hunting has also occurred.

Forest Resources

Wales Creek WSA contains 10,850 acres of commercial forest land. It also contains 730 acres of noncommercial forest land, which although bearing some timber is extremely low in wood production or is impossible to log due to the presence of extensive rock outcroppings. Wales Creek has a few nonforested talus slopes or meadow lands in its boundaries. The majority of the commercial forest land in Yourname Creek and numerous side drainages could be harvested without special harvest techniques, but 4,861 acres containing granitic soils in Wales Creek itself would require special harvest techniques. Although there are cherrystemmed roads into the core of the WSA following Yourname Creek and the ridgeline just north, access roads would need to be constructed if logging were started. The WSA has an estimated timber harvest capability of 707 mbf/year sustainable yield.

Timber species by acreage include 5,330 acres of lodgepole pine, 440 acres of ponderosa pine, 4,875 acres of Douglas-fir, and 118 acres of Englemann spruce. The lodgepole stands in the Wales Creek and Yourname Creek drainages have been identified as problem sites if the current level of mountain pine beetle infestation increases to the epidemic level.

Range Resources

At this time, the only livestock grazing occurs in the Yourname Creek drainage bottoms as the surrounding hillsides are steep and heavily forested. Most grazing occurs on the private mining claim that follows the creek in T. 12 N., R. 12 W., Section 18; and portions of T. 13 N., R. 13 W., Section 13 are presently leased. Approximately 820 acres of public land are leased under the terms of the McElwain AMP (7119/7120). Approximately three AUMs are available at the present time on these public lands. No other legal grazing occurs inside the WSA. There are no range improvements within or adjacent to this WSA except for a fence along the east boundary of Sections 1 and 12. The portion of the AMP, which includes the WSA lands, is grazed 1½, 2½, or 3½ months in rotation during the summer months each year. The fourth year the pasture is rested and no cattle use the area.

Until 1970, the Wales Creek drainage was leased for livestock grazing under the Wales Creek AMP (7121). However, watershed damage, adverse impacts on Montana west slope cutthroat trout populations, and general unsuitability for livestock grazing brought a halt to the program; and the WSA has not been leased since. The WSA has an estimated grazing capacity of 121 AUMs if completely leased.

Wildlife and Fisheries

Threatened and Endangered Species

Four wildlife species appear on the federal list of threatened or endangered species under the authority of the Endangered Species Act 1973, as amended. The four species are the threatened grizzly bear and the endangered Northern Rocky Mountain wolf, peregrine falcon, and bald eagle. The entire resource area has been reviewed for occupied, critical, or essential habitat recommendations for the four species. The outcome of the review did not yield any habitat recommendations for designation within this WSA. It should be mentioned, however, that the review is continually updated; and, when substantial information indicates a change in the recommendations is appropriate, those changes will be proposed. To date there is no new information to change the recommendations for Wales Creek WSA.

Big Game Species

Moose use the WSA in conjunction with surrounding similar habitat on a yearlong basis. A population census, made during 1977 to 1978, estimated 25 to 30 animals in the WSA. This included three mature bulls, five young bulls, and the remainder, cows and calves. There are five antlered bull permits issued each year with success of 100 percent most years coming from areas in or adjoining the Wales Creek WSA. The moose are highly dependent upon the habitat in Wales Creek and the adjacent Elk Creek burn. However, the habitat is changing, through natural processes, causing a reduction of forb producing habitat that the moose prefer.

The WSA is good to excellent elk summer and fall habitat, with some winter and spring use occurring at lower elevations, on ridgelines, and southern exposures in Wales and Yourname creeks. No population numbers are available. The roadless character and abundant security cover in Wales Creek and upper Yourname Creek are favorable attributes for elk management during the hunting season. A telemetry study in Chamberlain Creek has not found displacement of elk into Wales Creek as a direct response to logging activity. However, as activity in Chamberlain and other drainages surrounding the WSA expand and increase in intensity, the present characteristics of Wales Creek may become more attractive to elk.

Both mule deer and white-tailed deer make use of summer and fall habitat in the WSA. Limited winter and spring habitat is available in the lower elevations of Wales and Yourname creeks. No population or hunter harvest data can be extrapolated for the WSA.

Black bear occur in both Yourname and Wales creeks. No population data is available, however, the abundant and widely distributed riparian habitat of the WSA is favorable for the bear.

Indirect sign of mountain lion indicates this species occurs yearlong in the WSA.

Other Species

Cutthroat and brook trout occur in Yourname Creek, with cutthroat in Wales Creek. The lower productivity of fish in the two streams is typical of cool, granodiorite substrate, aquatic habitat of this region. Fishing pressure is very light; however, the aquatic system is important as a genetic reservoir of native trout and as a supply of high quality water to downstream fisheries.

Social and Economic Conditions

Public comment on the Wales Creek WSA was split with the majority of commentors supporting wilderness designation. Reasons included the WSA's unique scientific value as a lowland drainage, its wildlife values, the scarcity of undisturbed environments in the Garnet Range, and its quality wilderness characteristics. Those who opposed wilderness designation pointed out the existence of proven mineral potential and historic mining activity, potential geothermal resources, restrictions on forest insect control, restrictions on snowmobile and vehicle use, and the need to manage timber resources. Several individuals who supported wilderness classification favored dropping the southern portion.

The economy of the immediate area is largely based upon agriculture and the forest industry. Presently, timber harvest does not occur in the WSA. A limited number of AUMs are grazed in the WSA and adjacent ranchers have expressed a desire to increase grazing in the WSA.

The greatest use of the WSA is for recreation. An estimated 500 visitors, primarily elk hunters from the Missoula area, use the WSA each year. This use represents about $15,000 per year in expenditures.

HOODOO MOUNTAIN WSA (MT-074-151A)

General Description

The Hoodoo Mountain WSA is located in Powell County in the Garnet Range, approximately 16 miles northeast of Drummond, Montana. The WSA contains no inholdings and is surrounded by state, private, and other BLM lands.

Wilderness Resources

Size

The Hoodoo Mountain WSA is 11,380 acres of public land.

Naturalness

Hoodoo Mountain appears to be natural and to have been affected primarily by the forces of nature. Signs of past human presence include a complex of two-wheel track vehicle ways in the center and southern portion, two old mining cabins in the southern portion, and some minor, well screened livestock grazing improvements consisting of two developed springs and two fence lines. There are also two existing picnic sites on the west side. These developments are detailed in Table O-9 and the Hoodoo Mountain WSA Impacts map. The effect of these signs of human activity are minimal and they neither individually nor cumulatively detract from the WSA's apparent naturalness.

Outstanding Opportunities

The Hoodoo Mountain WSA has a diverse physiographic makeup consisting of forested areas, grassland parks, wet meadows, rock outcrop, and variable slopes. The combination of these features provide natural screening, which makes it easy for the visitor to find a secluded place.

The WSA is extensively forested with Douglas-fir, lodgepole pine, and some alpine fir, which provides a high degree of vegetative screening. Intermittent, small grassland parks, rock outcrop along the ridges, and wet meadows in the drainages are the only extensive open areas. These open areas allow for panoramic views of the adjacent forested slopes and help to enhance the users perception of solitude.

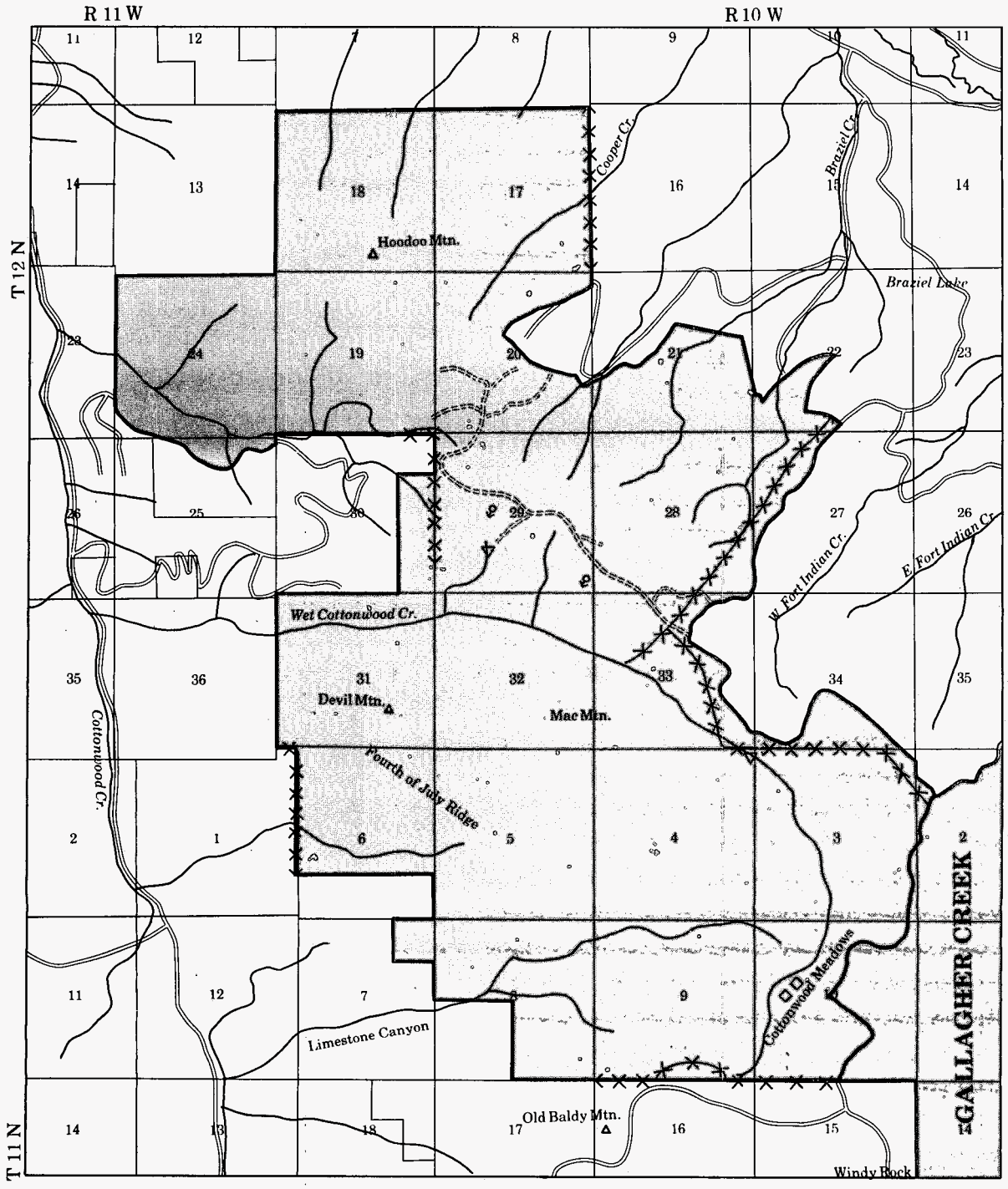
From higher vantage points a visitor can see traffic on State Highway 272 and on Nevada Lake but the one to two-mile distance from the borders of the WSA is enough to relegate most impacts to background influence.

The WSA's irregular, linear configuration and three-fourths mile to three-mile core-to-perimeter distance do not enhance its solitude values. However, the high degree of topographic and vegetative screening within the Hoodoo WSA provide outstanding opportunities for solitude.

Hoodoo Mountain's densely forested areas and intermittent open grassland parks and meadows are

TABLE O-9
EFFECTS ON NATURALNESS
HOODOO WSA

Feature	Legal Location	Length/Area	Impact	Remarks
Old Camp Spring	T12N, R10W, Sec. 29, SE¼NW¼	Under 1 ac.	Low	Developed livestock spring.
2 old cabins	T11N, R10W, Sec. 10, NW¼	Under 1 ac.	Low	Logs rotting away. Site mostly revegetated.
Vehicle Way 4	T12N, R10W, Sec. 28,29,30,33	Approx. 2½ mi.	Moderate	2-wheel track with vegetated mid-strip. Mostly screened by dense forest cover except when passes thru meadows.
Spur 4a	T12N, R10W, Sec. 28	Approx. 120 yds.	Low	Short spur to Vehicle Way 4.
Spur 4b	T12N, R10W, Sec. 28,29	Approx. 50 yds.	Low	Spur to Vehicle Way 4
Spur 4c	T12N, R10W, Sec. 19,20	Approx. 1/4 mi.	Low	Spur to Vehicle Way 4.
Spur 4d	T12N, R10W, Sec, 20	Approx. 150 yds.	Low	Spur to Vehicle Way 4.
Vehicle Way 3	T12N, R10W, Sec. 33	Approx. 1/2 mi.	Low	2-wheel track with vegetated strip. Some light maintenance has been done.
Vehicle Way 8	T12N, R10W, Sec. 20	Approx. 3/4 mi.	Low	Some light improvements. Little use. 2-wheel track.
Vehicle Way 10	T12N, R10W, Sec. 9	Approx. 100 yds.	Low	2-wheel track. Mostly revegetated.
Recreation Development Old Camp Cr.	T12N, R10W, Sec. 29	Under 1 ac.	Low	Fire rings.
Recreation Development Green Park	T11N, R10W, Sec. 4, NE¼NE¼, Sec. 3	Under 1 ac.	Low	Fire rings.
Range fence	T12N, R10W, Sec. 22,27,28, 29,33,34, T11N, R10W, Sec. 3	Approx. 7 mi.	Moderate	Well screened by forest cover.
Spring Development (unnamed)	T12N, R10W, Sec. 29, SE¼SE¼		Low	
Spurs (not numbered)	T12N, R10W, Sec. 28,29,	Approx. 1/4 mi.	Low	Spur to Gobbler's Knob.
	T12N, R10W, Sec. 29, SE¼NW¼	Approx. 1/8 mi.	Low	Spur to Old Camp Spring.
Line fence	T12N, R10W, Sec. 17	Approx. 1 mi.	Low	
Line fence	T11N, R10W, Sec. 6, T12N, R10W, Sec. 31	Approx. 1¼ mi.	Low	
Fence	T11N, R10W, Sec. 9,10	Approx. 1¾ mi.	Low	Runs along section line and road.



WSA Boundary

Fence

Recreation Development

Cabin

Spring Development

Vehicle Way

HOODOO MOUNTAIN IMPACTS

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NORTH

0 1 Miles 2

0 1 Kilometers 2 3

excellent habitat for a variety of wildlife. Because of this, outstanding opportunities exist for bird watching, nature study, and walk-in big game hunting. Opportunities for day hiking, cross-country skiing, and snowshoeing are also available. Presently, there are unmaintained trails that were marked by the Blackfoot Forest Protective Association in the vicinity of Cottonwood Meadows, Fourth of July Ridge, and other sections of the WSA. Some opportunities for fishing, camping, photography, and horseback riding also exist. In summary, diverse and quality primitive and unconfined recreational activities are possible within the Hoodoo Mountain WSA.

Supplemental Values

The WSA contains many features of ecological value such as the densely forested areas, open grassland parks, meadows, and small creeks that provide excellent habitat for a wide range of wildlife such as elk, mule deer, white-tailed deer, black bear, porcupine, grouse, eagles, hawks, and other nongame species. It is believed that marten, fisher, and wolverine use the WSA. In addition, a number of marked foot trails made by sheepherders 25 to 50 years ago and the two log cabins may have historical value.

Ecosystem Representation

The WSA contains three different ecotypes. The Douglas-fir forest makes up 12 percent of the WSA; western spruce and fir forest, 62 percent; and alpine meadows and barren, 26 percent. All of these ecotypes are well represented in existing wilderness areas.

Hoodoo Mountain lies in an area where vast national forest lands have been designated as wilderness. Several more areas have been recommended for wilderness.

Summary of Wilderness Quality

Although the WSA's irregular shape does not enhance solitude conditions and the WSA is somewhat adversely affected by nearby human activity, these problems are insignificant when compared to its generally excellent solitude, outstanding opportunities for primitive recreation, and natural condition.

Soil and Water Resources

The WSA contains the Braziel and Wet Cottonwood Creek drainages. Channel stability analysis has been run on Braziel and Wet Cottonwood creeks. Within the WSA boundaries both stream channels appear to have only moderate resistance to damage due to increased stream flow. Available water quality data indicates that the suspended sediment concentrations in Wet Cottonwood Creek during runoff periods is less than 50 mg/l and, therefore, is in very good condition. Water quality data is not available for Braziel Creek because activities that require such monitoring have not occurred. However, in the absence of disturbance, water quality is assumed to be very good.

Belt series rock (6,400 acres), tertiary-age andesite (4,900 acres), and tertiary-age rhyolite (200 acres) occur in the WSA. Areas of cliff and talus are present along with extensive areas of wet meadows and riparian zones especially along Wet Cottonwood Creek.

Soils in this WSA range from those with weakly developed subhorizons to soils with clayey subhorizons. The weakly developed soils usually have high gravel content and are minimally prone to compaction and erosion. Soils with clayey subhorizons, where gravel content is moderate, have a moderate to high compaction and erosion potential. These soils are also prone to slump problems, especially where shallow groundwater is present. T. 12 N., R. 10 W., Section 22, SW¼ contains an example of the type of slump that can occur on these materials.

Energy and Minerals

The geology of the Hoodoo Mountain WSA is similar to that of the Wales Creek WSA, and the discussion of energy and minerals for that WSA is also applicable to Hoodoo Mountain with the exception that it has no unpatented mining claims. One hundred percent of Hoodoo Mountain WSA is covered by post-FLPMA oil and gas leases or applications.

The Hoodoo Mountain WSA has moderate potential for metallic mineral resources in parts of the WSA and low potential in others. Much of the area is covered by lava deposits which makes resource assessment difficult. Potential for other resources is generally considered low. The level of confidence in the classification is moderate.

Recreation Resources

In this WSA there are excellent opportunities for sightseeing, camping, horseback riding, walk-in hunting, backpacking, and day hiking. In addition, there is potential for a limited amount of motorized vehicle use, particularly motorcycle and four-wheel drive use, in association with fall hunting. Opportunities for photography, fishing, cross-country skiing, nature study, and rock climbing also are available.

Fall hunting provides the primary recreational use of Hoodoo Mountain WSA. The WSA is part of the West Fork Braziel Creek/Gobbler's Knob/Cottonwood Creek walk-in hunting area which contains 15,000 acres, including 12,000 acres of public lands. However, a much larger area is effectively closed to vehicular traffic because of limited access through private lands north and west of the WSA.

Two small picnic sites exist at the edge of the WSA. Both contain fire pits, picnic tables, and a lean-to shelter but are seldomly visited.

Recreation use, except for hunting, has been limited because of the remoteness of the WSA, the absence of a maintained trail system, and the lack of a good road to the WSA boundary. Professional estimates of BLM recreation planners indicate approximately 200 visitors per year. This is a popular hunting area which

receives considerable early season use. An estimated 90 percent of use or 180 visits are related to hunting activities.

Visual Resources

Hoodoo Mountain WSA is classified in VRM Class I (see Appendix F).

Cultural Resources

A limited cultural resource inventory indicates the Hoodoo Mountain WSA, which is environmentally similar to the Wales Creek WSA, had a similar type of prehistoric use pattern. The one site recorded to date was located in a resource concentration area, and it dates to the Early Middle Period. This would suggest this WSA would also function as an area for testing hypotheses on prehistoric subsistance strategies.

The lack of precious metals mineralization prohibited the development of a mining industry. Historically, the primary use of the WSA was as summer forage for domestic sheep and later cattle grazing. Hunting was also an important historical use.

Forest Resources

Hoodoo Mountain WSA contains 9,078 acres of commercial forest land. It also contains 1,983 acres of noncommercial forest land which, although forested, is extremely low in timber productivity or is impossible to log due to the presence of extensive rock outcrops. Hoodoo Mountain also has 319 acres of nonforested talus slope and meadow land. Most of the commercial forest land could be cut without special management but 2,402 acres would require special harvest techniques to avoid environmental degradation. The WSA lacks any access road so, if logged, roads would have to be constructed. The WSA has an estimated timber harvest capability of 635 mbf/year sustainable yield. Timber species by acreage in the WSA include 9,817 acres of lodgepole pine, 1,207 acres of Douglas-fir, and 37 acres of Engelmann spruce.

Range Resources

A large portion of the WSA is under lease for livestock grazing under the terms of the Braziel Creek (7207) and Devil Mountain (7210) AMPs. The area under lease is used by livestock two out of three years at some time between July 1 and September 30. The third year the area is totally rested. Approximately 124 AUMs are licensed out of a total of 186 AUMs available within the WSA. Also, two spring developments and approximately seven miles of fence are within the WSA. Evidence can occasionally be found of trespass grazing use in Cottonwood Meadows and at the south end of Fourth of July Ridge but such trespass is sporadic.

The WSA has an estimated grazing capacity of 184 AUMs if it were completly leased. No range development projects are planned inside this WSA.

Wildlife and Fisheries

Threatened/Endangered Species

There is no known occupied, critical, or essential threatened and endangered species habitat in the Hoodoo Mountain WSA.

Big Game Species

Elk habitat is used primarily in the summer and fall. Some early winter and late spring use may occur in small areas during mild seasonal weather patterns. The roadless character and adequacy of security cover in the WSA creates favorable summer and fall habitat for this species.

Mule deer use the WSA in late spring through the fall. Little or no wintering activity is found. This is the second year of the current telemetry study for mule deer seasonal distribution. Seasonal and yearlong home ranges are being formulated based on preliminary data for this species.

Black bear occur in the WSA, but densities appear to be low.

Other Species

Cutthroat trout are present in Cottonwood Creek in limited numbers and size. Fishing pressure is very low in the WSA.

Social and Economic Conditions

Public comment on this WSA was split. Those who were against wilderness designation underlined the value of its timber. Some identified the presence of human impacts in the form of fences, spring developments, stock driveways, recreation campsites, and vehicle ways. However, of these, several also indicated that these developments did not detract from the naturalness or opportunities for solitude and primitive recreation.

Proponents of wilderness designation pointed out the historic old sheep trails; outstanding natural beauty; and presence of wolverine, marten, and fisher, in addition to a variety of the more common wildlife. Cottonwood Meadows were identified as a special attraction. Several also noted that the WSA has the ability to easily revert to a natural condition.

The general economic setting is the same as for Wales Creek. The WSA presently attracts 200 visitors per year which equates to about $7,000 to the regional economy. Grazing in Hoodoo WSA is more extensive than Wales Creek. A total of 124 AUMs are leased for $170 in grazing fees each year.

GALLAGHER CREEK 202 WSA

General Description

The Gallagher Creek 202 WSA is bordered on the west by Hoodoo Mountain WSA and is located in the Garnet Range in Powell County. It is located approx-

imately 18 miles northeast of Drummond, Montana. The study area contains no inholdings and is surrounded by private, state, and other BLM lands.

Wilderness Resources

Size

The Gallagher Creek 202 WSA is 4,257 acres of public land.

Naturalness

Gallagher Creek appears to be predominantly natural in character with few signs of human presence. As shown in Table O-10 and the Gallagher Creek 202 WSA Impacts map, there are remnants of an old cabin in the southern portion, a two track vehicle way jutting from the northern boundary road, and a range fence on its northern edge. These structures have no more than localized adverse effect. The 202 WSA is otherwise undeveloped and retains its pristine character.

Outstanding Opportunities

Opportunities for solitude in the Gallagher Creek 202 WSA are outstanding as the distribution of the coniferous forest tends to isolate visitors, yet is not so dense as to preclude travel.

The forest vegetation is mainly Douglas-fir and lodgepole pine with Engelmann spruce along stream bottoms. Aspen pockets in the drainages, scattered open meadows, and rock bluffs and scree slopes visually enhance the predominant forest. Gallagher Creek and Indian Creek, along with their tributaries, supply walking routes.

Gallagher Creek is only two miles from ranching operations, State Highway 272, and Nevada Lake. However, this two-mile separation and vegetative screening effectively minimizes most visual and audio impacts.

Perimeter roads and public land ownership boundaries make for very irregular borders. Core-to-perimeter distances vary from 1/2 to 2-1/2 miles. Its configuration does not enhance its solitude values; but presently this is not a significant problem as it is surrounded by undeveloped, natural appearing lands. Its small size would preclude effective management for wilderness if disruptive offsite activities were to occur.

The 202 WSA's topography and scenery provide hiking, backpacking, sightseeing, and photographic opportunities of exceptional quality. The resident wildlife populations also offer excellent opportunities for nature study, photography, and walk-in hunting. The opportunities for primitive and unconfined recreation are outstanding in quality and diversity.

Supplemental Values

Gallagher Creek provides occupied habitat for several significant species of wildlife. Elk, mule deer, black bear, white-tailed deer, and mountain lion inhabit the 202 WSA. There are numerous nongame species, and some of the more uncommon ones are bobcat, wolverines, marten, and fisher. Grouse are also abundant. Limited peregrine falcon habitat has also been identified. Of special interest are specimens of petrified wood found along Gallagher Creek.

Ecosystem Representation

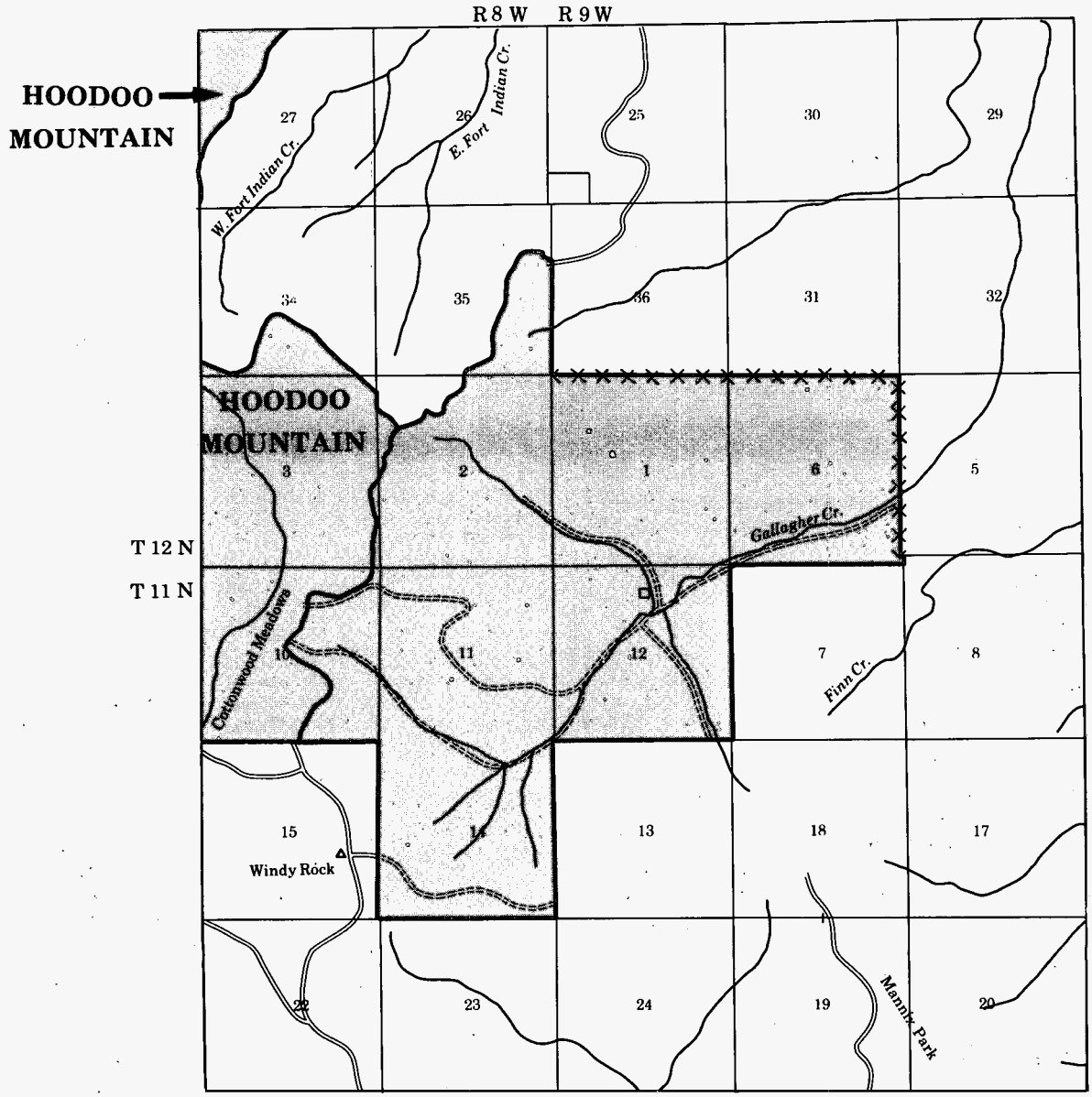
Gallagher Creek consists of three different ecotypes. Douglas-fir forest makes up 29 percent; western spruce and fir forest, 73 percent; and alpine meadows and barren, 22 percent. All of these ecotypes are well represented in existing wilderness areas.

Gallagher Creek lies in an area where vast national forest lands have been designated as wilderness. Several more areas have been recommended for wilderness.

TABLE O-10

EFFECTS ON NATURALNESS
GALLAGHER CREEK 202 WSA

Feature	Legal Location	Length/Area	Impact	Remarks
Vehicle Spur	T11N, R10W Sec. 2, NW¼, SW¼	100 yards	Low	Spur to vehicle way #1 (NW boundary of area)
Old Cabin	T11N, R10W Sec. 12, NW¼, NE¼	under 1 acre	Low	Remnant cabin
Range Fence	T11N, R10W Sec. 1, 2, T11N, R9W, Sec. 6	approx. 4 miles	Moderate	



GALLAGHER CREEK IMPACTS

==== Vehicle Way

—✕— Fence

▫ Cabin

NORTH

0 1 2 Miles

0 1 2 3 Kilometers

1:63,360

Summary of Wilderness Quality

The 202 WSA is natural, offers opportunities for solitude and primitive recreation, and provides important wildlife habitat. However its small size would make it unmanageable to preserve wilderness values if disruptive offsite activities occurred.

Soil and Water Resources

Channel stability analysis rates Gallagher Creek as having only moderate resistance to damage from increase in stream flow. There is no water quality data. By analogy to similar basins elsewhere in the Garnet Resource Area, water quality is judged to be good to excellent, especially as this watershed is almost totally undisturbed.

There are numerous wet areas and springs in the upper reaches of this drainage. These riparian areas are especially sensitive and require specialized management to maintain their current condition.

Approximately 3,200 acres occur on tertiary age volcanics (andesite) with about 900 acres of tertiary age rhyolite. Substantial areas of cliff and talus occur.

Soils formed in andesite have weakly to moderately developed subhorizons with a high gravel content. The low clay content soils have few problems insofar as general management activities are concerned. Where clay content is in the 25 to 34 percent range the soils are somewhat prone to gully development.

Soils formed in tertiary age rhyolite have weakly developed subhorizons with low clay and high gravel content in the profile. These soils are generally stable for most uses.

Energy and Minerals

The geology of the Gallagher Creek 202 WSA is similar to that of the Wales Creek WSA and the discussion of energy and minerals for the WSA is also applicable to Gallagher Creek with the exception that it has no unpatented mining claims. One hundred percent of Gallagher Creek 202 WSA is covered by post-FLPMA oil and gas leases or applications. It is almost entirely covered by lava and as such is considered to have a low probability for most energy and mineral resources. However, the confidence in the classification is only moderate.

Recreation Resources

Recreational opportunities in the Gallagher Creek 202 WSA are significant. The cliff walls and unique geologic features provide for unusual scenic views. Hunting potential is high, with numerous wild game species available. Other recreational experiences include rock climbing, camping, fishing, nature study, bird watching, day hiking, backpacking, and horseback riding.

The dominant use of the 202 WSA is fall hunting. Motorized vehicle use along peripheral vehicle ways is light except during hunting season. Because of the lack of internal roads and the presence of adjacent private lands on the eastern boundary, the 202 WSA is a walk-in hunting area.

Recreation use, except for hunting, is light because of its remoteness, the absence of a maintained internal trail system, and a good road to its boundary. Professional estimates of BLM recreation planners indicate approximately 100 visitors per year view the 202 WSA. It is used considerably by hunters during the fall, and an estimated 90 percent of use or 90 visits per year are hunting related.

Visual Resources

Gallagher Creek 202 WSA is classified in VRM Class I (see Appendix F).

Cultural Resources

The Gallagher Creek 202 WSA is contiguous to the Hoodoo Mountain WSA and appears to contain similar cultural resources. Very little cultural resource inventory has actually occurred within the 202 WSA.

Forest Resources

This 202 WSA contains 3,274 acres of commercial forest land. It also contains 922 acres of noncommercial forest land which although forested is extremely low in timber productivity or is impossible to log due to the presence of extensive rock outcrops. Gallagher Creek also has 61 acres of nonforested talus slope or meadow land. Most of the commercial forest land could be cut without special management, but 962 acres would require special harvest techniques. The 202 WSA lacks any access road so, if logged, roads would have to be constructed. The 202 WSA has an estimated timber harvest capability of 249 mbf/year sustainable yield. Timber species by acreage include 1,172 acres of lodgepole pine, 109 acres of ponderosa pine, and 2,915 acres of Douglas-fir.

Range Resources

There is no authorized livestock grazing within this 202 WSA. Evidence can be found of trespass cattle use in the low reaches of Gallagher Creek in abnormally dry summers. Steps are presently being taken to construct a drift fence in the southeast side and a three mile fence on the north and east sides of this study area that should resolve the livestock trespass use. There is one fence development. The 202 WSA has an estimated grazing capacity of 154 AUMs if it were completely leased. No range improvement projects are planned.

Wildlife and Fisheries

Threatened and Endangered Species

There is no known occupied, critical, or essential threatened and endangered species habitat in the Gallagher Creek 202 WSA.

Big Game Species

Elk habitat is used primarily in the summer and fall, with occasional late winter and early spring use along the southern exposures of the eastern part. Adequate fall security cover in a roadless setting and a good mix of habitat components make this an important elk area.

Mule deer use the 202 WSA from late spring through fall following migration from winter ranges about 11 miles to the west and south. It contains high quality fawning, forage, and security habitat. Six years of telemetry data supports the seasonal distribution and use of this 202 WSA.

Black bear are found throughout the Gallagher Creek drainage.

Other Species

Cutthroat trout are present in fair numbers. Forest grouse are common. The cliff areas at the head of Gallagher Creek hold significant raptor habitat.

Social and Economic Conditions

Comments pertaining to wilderness designation for Gallagher Creek both supported and argued against such classification. Those who favored wilderness designation cited its opportunities for solitude and primitive recreation and its naturalness as well as its wildlife and historic trail values. Opponents underlined its contribution to the forest land base, felt that wilderness would interfere with game harvest, and stated that the existence of grazing improvements and the bisecting vehicle way precluded its naturalness.

The general economic setting is the same as that of Wales Creek. The area receives 100 visitor days per year which means $3,450 to the regional economy. No grazing or timber harvest presently takes place in the area; however, adjacent ranchers are interested in obtaining grazing leases in the 202 WSA.

QUIGG WEST 202 WSA

General Description

Quigg West lies adjacent to the 60,500-acre Forest Service RARE II Area, Quigg (Q1-807). The 202 WSA is located 20 miles west of Philipsburg, Montana, in Granite County. It contains no inholdings and is surrounded by private and national forest lands.

Wilderness Resources

Size

Quigg West contains 520 acres of public lands.

Naturalness

Quigg West is completely natural in character with human impacts, past or present, unnoticeable. The only human imprints upon the landscape are two footpaths, one in each of the two drainages. However, these paths are often untraceable and are believed to be game trails making them part of the natural habitat of the native fauna. The lack of continuity of both trails preclude their consideration as significant impacts in any context. The tack-on as a whole appears untouched by humans and is in a totally natural state.

Outstanding Opportunities

The topography and vegetative cover of Quigg West enhances its solitude opportunities. Two drainages, Capron Creek and Sheep Gulch, transect the tack-on. The extremely steep, side slopes are interspersed with coniferous forest cover and talus open areas while the tops of the ridges between and around the drainages are primarily Douglas-fir forest. The boundaries are very irregular, following public ownership boundaries. Core-to-perimeter distances are as little as 200 yards and as much as three-fourths of a mile.

Quigg West does offer outstanding opportunities for solitude in conjunction with the Forest Service RARE II area. The steep slopes of the two drainages keep visibility restricted to the user's immediate area. On the ridge the vegetation is dense enough to limit a visitor's ability to see others. The drainages themselves are not only densely vegetated but have bends and turns in them that effectively isolate people from one another. The tack-on, however, is too small to supply outstanding solitude by itself. Its value lies in the enhanced solitude and varied terrain it provides for users of the Forest Service Quigg RARE II area.

Quigg West offers opportunities for primitive or unconfined types of recreation. However the topography is quite steep for travel by foot or horseback. The vegetation in the drainages is dense enough to make travel difficult and at times almost unpleasant. Those opportunities that do exist are for hiking, backpacking, and hunting. The opportunities for these activities are less than outstanding, primarily due to the limited access.

Supplemental Values

Quigg West provides critical yearlong range for bighorn sheep as well as for elk and mule deer.

Ecosystem Representation

Quigg West consists of three different ecotypes. Douglas-fir forest makes up 72 percent; western spruce and fir forest, 5 percent; and alpine meadows and barren, 23 percent. All of these ecotypes are well represented in existing wilderness areas.

Quigg West lies in an area where vast national forest lands have been designated as wilderness. Several more areas have been recommended for wilderness.

Summary of Wilderness Quality

Quigg West is pristine and would provide outstanding opportunities for solitude and for primitive recreation in conjunction with the Forest Service RARE II Quigg area.

Soil and Water Resources

The entire tack-on occurs on Belt series rock. Much of the tack-on is rock outcrop and the remainder has soils with weakly developed subhorizons and high gravel content. These soils are very stable with a low erosion and compaction potential.

Stream reach inventory and water quality data are not available. Other areas in the Garnet Resource Area with similar bedrock geology and soils have channels which are highly resistant to erosion and have high quality water, especially in the undisturbed state. The same is assumed to be true for Sheep Gulch and Capron Creek. Sensitive riparian areas have not been identified.

Energy and Minerals

The tack-on is within the Montana Overthrust Belt, a region in which the rocks have been thrust eastward over one another to form repeating stacks of units. The bedrock consists of very old sedimentary rocks that have been intruded by much younger rocks. The intrusions may be part of the same type as found at Butte, Montana. The bedrock is capped by stream, lake, and glacial sediments and locally by young volcanic rocks.

The tack-on is in a mineralized region. The Philipsburg Mining District is located to the east, and the Blackpine copper, silver, and tungsten mine is ten miles to the northeast. Placer gold occurs in many of the streams, and there is one small inactive gold/silver lode mine nearby. U.S. Geological Survey geochemical data show a strong barium anomaly in one stream draining from Quigg West. Barium is commonly associated with gold in the area. In addition, parts of the tack-on are covered by older gravels similar to gold bearing gravels on the east side of the Garnet Resource Area. Together the geochemical data and presence of older gravels indicate moderate potential for lode and placer gold.

Half of this tack-on has been leased for oil and gas (post-FLPMA) and the remaining portion is under application and will not be leased because of the present moratorium in wilderness study areas. There are no unpatented claims recorded in its boundary. Stipulations regarding the wilderness values are specially attached on oil and gas leases. Under the 3802 Regulations, unpatented mining claims with mineral development are regulated to prevent impairment; so if any are located, these standards will be applied.

The geologic environment in Quigg West and interpretation of available geochemical data indicate a low probability for uranium, geothermal resources, oil, and gas.

Recreation Resources

The primary recreational activity in Quigg West is big game hunting in the fall. The tack-on provides some dispersed recreation in the form of hiking and horseback riding, but does not receive a large amount of use. The best professional estimate of BLM recreational planners indicates that approximately 25 visitors use the tack-on per year. All use is estimated to be hunting related.

There are no vehicle ways nor any constructed recreational facilities. The tack-on is part of the Ram Mountain walk-in hunting area, which is managed as a yearlong closure to motorized vehicles. This closure contains 11,100 acres of which 4,800 acres are BLM lands. The absence of internal trails and intervening private lands make access difficult.

Visual Resources

Quigg West is classified in VRM Class I (see Appendix F).

Cultural Resources

Although no cultural resource inventory has occurred within the Quigg West tack-on, intensive inventory has occurred on BLM-managed lands immediately to the east. Based upon this inventory and the prehistoric and historic site orientation patterns observed, it is unlikely this small tack-on will contain any cultural resources.

Forest Resources

The tack-on contains 284 acres of commercial forest land. It also contains 214 acres of noncommercial forest land which although forested is extremely low in timber productivity or is impossible to log due to the presence of extensive rock outcropping. Quigg West also has 22 acres of nonforested talus slope or meadow land. Due to the steep topography, only 22 acres could be cut without special timber techniques. The remainder would require special harvest techniques. The tack-on lacks any access road so, if logged, roads would have to be constructed. The tack-on has an estimated timber harvest capability of 15 mbf/year sustainable yield. Timber species by acreage in the area include 434 acres of lodgepole pine and 64 acres of Douglas-fir.

Range Resources

This small tack-on is not leased for livestock grazing. Occasional trespass horse use has been noted, but use is very sporadic. The tack-on has an estimated capacity of 20 AUMs if leased.

Wildlife and Fisheries

Threatened and Endangered Species

There is no known occupied, critical, or essential threatened or endangered species habitat on the Quigg West tack-on.

Big Game Species

Elk and mule deer late spring through fall habitat is found in a mix of timbered fingers and pockets intermingled with mountain dry parks. This habitat is contiguous with adjacent Forest Service and BLM elk and mule deer habitat.

Bighorn sheep make use of the tack-on through the summer and fall period as part of the Ram Mountain herd distribution approaching 200 animals.

Black bear are common in the tack-on and have been observed on its grassland slopes.

Other Species

There are no fisheries present. Management goals for wildlife in the tack-on should be aligned with the goals of the greater Forest Service Quigg RARE II area should they be designated wilderness.

Social and Economic Conditions

Most public comment to date has favored wilderness designation. Supporters cited old-growth timber stands, bighorn sheep populations, wildlife protection, and enhancement of the values on the adjacent Forest Service RARE II area as reasons to designate Quigg West as wilderness. Those who opposed wilderness designation pointed to conflicts with timber and minerals extraction industries and discrimination against those who prefer to use vehicles for their recreation.

The local economic setting is the same as that of Wales Creek. Quigg West attracts 25 visitor days, which contribute approximately $1,000 to the regional economy. Presently no grazing or timber harvest takes place in the tack-on.

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

WALES CREEK (SECTION 603): ALTERNATIVE A

Impacts on Wilderness Resources

The management of the WSA as a special management area would prevent short-term degradation of wilderness values on all 11,580 acres. This alternative, however, would be less secure in its protection of wilderness values than would wilderness designation because surface disturbing resource uses would be allowable if in accordance with management goals.

Naturalness, solitude, and scenic values could be degraded or destroyed if surface disturbing activities such as fire suppression, and mining operations were to occur. Likewise, vehicles allowed in accordance with management goals for activities such as recreation and mining would have at least a periodic impact on natural and solitude values. Conversely, management goals for a special management area would likely protect wilderness values on much of the 11,580 acres.

Due to the small size of the WSA and the abundant local supply of wilderness (3,431,339 acres in the region), nondesignation for this WSA would have little effect on providing wilderness opportunities close to metropolitan areas or expanding the geographical distribution of the NWPS. Likewise, as all three ecosystems represented in the WSA are well represented in the region and in the NWPS, designation of this WSA would not add to the diversity of the system (see Appendix Q).

Conclusion

Nondesignation of Wales Creek WSA along with the establishment of a special management area would likely protect wilderness values on 11,580 acres in the short term. However, depending on management goals for the area, some disruption of these values could occur over the long term.

Impacts on Soil and Water Resources

The loss of highly erosive granitic soils due to surface disturbing activities on 11,580 acres would likely occur to only a minor degree if Best Management Practices were applied (see Appendix B). Impacts of mining activity, if allowed by special management goals, would adversely affect sedimentation and water quality on Wales Creek and Yourname Creek.

Impacts on Energy and Mineral Resources

The release of the WSA from wilderness consideration may allow mineral exploration and development on 11,580 acres over the long term. Standard and special stipulations on oil and gas leases in the special management area would restrict exploration and development over the long term.

Impacts on Lands Program

Restricting transportation and utility corridors on 11,580 acres would cause a long-term decrease in possible corridor routes in the Garnet Resource Area.

Impacts on Recreation Resources

Mineral development, if allowed, could cause both a short and long-term impact by disturbing scenery and recreation sites. Special management for 11,580 acres may result in an increase in primitive recreation opportunities.

Impacts on Cultural Resources

Although provisions for inventory, mitigation, or avoidance of impacts on cultural resources exist, surface disturbing activities could result in some disturbance or destruction of cultural values. Conversely, increased resource management activity will likely stimulate discovery of cultural sites in the WSA.

Impacts on Visual Resources

Mineral development, if allowed, could cause short-term impacts that would bring about evident changes in the landscape.

Impacts on Forest Resources

The CFL on 10,850 acres within the WSA would not be available for harvest in the short and long term.

Impacts on Range Resources

There are only three AUMs being used at present by a grazing permittee who leases 820 acres of the WSA. If the entire 11,580 acres were leased, 121 AUMs would be available. Grazing in this alternative is limited to existing use; there is a potential 118 AUMs that would remain unused.

Impacts on Wildlife and Fisheries Resources

Special management on 11,580 acres would maintain or slightly improve habitat quality over the long term if wildlife habitat improvement projects were allowed. If management goals did not allow such improvement projects, the habitat condition for moose and elk can be expected to deteriorate as climax habitat increases in the WSA. This is especially critical for moose in the Wales Creek drainage, which provides the habitat for the nucleus population in the Garnet Range. If mineral development is allowed in riparian habitat, the habitat for many wildlife species would be destroyed and streambeds disrupted.

Impacts on Socioeconomic Conditions

Economic gains from 118 potential AUMs of livestock grazing and 789 mbf annual timber harvest would not be available. The recreation opportunities provided under this alternative enhance the western lifestyle which incorporates backcountry activities, hunting, and visiting historical sites.

WALES CREEK: ALTERNATIVE B

Impacts on Wilderness Resources

Selection of this alternative would give no special legislative protection to natural values on 11,580 acres. In the short term and long term alike, there would be some adverse affects on wilderness values. If resource development occurs, naturalness, solitude opportunities, and scenic values of those portions impacted would be permanently degraded or destroyed, affecting the wilderness qualities of the area.

A total of 10,683 acres of CFL would be available for timber management and 789 mbf would be cut annually. This would cause a long-term loss of naturalness and solitude values.

Timber harvest would create transitory range allowing grazing to increase. This would cause both short and long-term impacts on wilderness values by expanding the need for motorized vehicles for herd management and for construction of range projects.

Energy and mineral exploration and development without special stipulations to protect solitude and natural values would cause short-term impacts, if no discoveries were made, from the use of motorized and seismic equipment. If discoveries were made, long-term impacts would result from access roads, pipelines, drill pads, etc.

Utility and transportation corridor development in this WSA could result in long-term impacts on solitude and naturalness by altering the landscape and building the line and service road. The development would draw motorized use to the corridor.

Impacts on Soil and Water Resources

Unit management goals would not be able to mitigate the affects of surface disturbing activities on all 11,580 acres. Special practices would be required to prevent erosion on granitic soils. The numerous wet drainages and rock outcropping would make development difficult and surface disturbing activities could seriously effect water quality including that of the hot springs.

Road construction from timber harvest and mining activities would cause short-term increases in sediment production in streams.

Impacts on Energy and Mineral Resources

This alternative would allow the greatest degree of unrestricted energy and mineral exploration and development.

Impacts on Lands Program

There would be no restrictions on possible siting of transportation or utility corridors on any of the 11,580 acres of this area.

Impacts on Recreation Resources

Those opportunities associated with a roadless experience would be forgone.

Timber harvest of 789 mbf annually and associated road construction will have long-term impacts on dispersed recreation causing both a decrease in recreation opportunities associated with undeveloped land and an increase in motorized recreation.

Mineral, oil and gas, and transportation and utility corridor development could cause short and long-term impacts by disturbing recreation sites.

Opening the area for multiple use would cause a long-term increase in seasonal motorized recreation and long-term decrease in primitive recreation.

Impacts on Cultural Resources

Impacts on cultural resources under this alternative would be the same as Alternative A except there would likely be more surface disturbing activities permitted. This would result in more opportunity to discover cultural sites, but might result also in an increase in site disturbance as well.

Impacts on Visual Resources

Mineral and forest resource development would cause short and long-term impacts that would bring about evident changes in the landscape.

Impacts on Forest Resources

This alternative would allow 789 mbf to be harvested annually and would permit the timely control of forest insect and disease outbreaks. This would protect the productivity of CFL both within and adjacent to the Wales Creek area.

Impacts on Range Resources

This alternative would allow the grazing of 121 AUMs. Forest harvest and mining activities which open up the forest canopy would allow an opportunity for an increase in grazing to use the transitory range thus created.

Impacts on Wildlife and Fisheries Resources

Wilderness benefits to wildlife such as decreased disturbance on elk and deer summer and fall habitat and natural vegetative changes would be forgone. There could be a loss of fall hunting season security cover depending on the goals of the timber harvest program and also a loss of moose winter habitat. Wildlife could be displaced on 11,580 acres if the level of resource development exceeded an unquantifiable amount.

Management activities on about 11,580 acres will cause long-term impacts to wildlife summer and winter range by reducing security cover, thermal cover, and old-growth timber stands; disturbing riparian sites and areas where young are reared; increasing social intolerance and forage competition with livestock; and increasing the destruction of habitat by road building and other resource development.

Mineral development of riparian habitat will destroy habitat for many wildlife species and disrupt streambeds.

Short-term impacts to fisheries habitat would be caused by road construction disturbing streambeds.

Impacts on Socioeconomic Conditions

Selection of this alternative would benefit the economic picture by allowing for the grazing of 121 AUMs and the harvest of 789 mbf of timber annually. Forest management would create seven primary jobs in the private sector for timber harvest, planting, and timber stand improvement. Secondary jobs of processing the timber would also be created.

Grazing management could contribute an increase in ranch income over the long term. Recreation on public lands will contribute about the same opportunities as in Alternative A. Mining on public lands will contribute jobs and money to the local economy.

WALES CREEK: ALTERNATIVE C

Impacts on Wilderness Resources

Selection of this alternative would best preserve the wilderness qualities on 11,580 acres in the Wales Creek WSA. The naturalness of the WSA would be ensured over the long term and natural ecological changes would continue to occur. The WSA's opportunities for solitude and primitive recreation would be best guaranteed for future visitor enjoyment. Preservation of wilderness values would in turn protect the WSAs scenic values. Potential ecotype diversity and spatial distribution advantages for adding the unit to the NWPS would be the same as in Alternative A.

Due to the existence of 40 mining claims and the two cherrystemmed roads in this alternative, the WSA could not successfully be managed for the long term as wilderness.

Impacts on Soil and Water Resources

Soil and water resources would be protected from degradation under this alternative.

Impacts on Energy and Mineral Resources

New mineral entries or oil and gas leases would be disallowed if this alternative were chosen. The existing 40 unpatented claims would be honored if the

owners have maintained validity of their claims. If this alternative were chosen, there would be a loss of 11,580 acres of moderate to high potential metallic mineral resources. Existing mineral claims would be restricted by special conditions to protect wilderness values if the claims were developed.

Impacts on Lands Program

Restricting transportation and utility corridors on 11,580 acres would cause a long-term decrease in possible corridor routes in the Garnet Resource Area.

Impacts on Recreation Resources

ORV closures on 11,580 acres would not significantly impact snowmobiles or four-wheeled motorized vehicle users as present use is largely confined to existing roads. One mile of vehicle way would be closed causing a loss of some motorized recreation. Most of the recreation use at present is not dependent on motorized vehicles so that the estimated 500 visitors per year would not decrease and could increase due to interest in the wilderness, at least for the short term. The degree of increase is not known at this time. Wilderness designation for 11,580 acres will allow maintenance of existing primitive recreation activity and backcountry hunting opportunities.

Impacts on Cultural Resources

Selection of this alternative would result in far less surface disturbing activity and therefore a decrease in disturbance of cultural sites on 11,580 acres. There would possibly be some adverse affect on cultural resources from recreational use of the portions of the WSA used by prehistoric, historic, and modern visitors alike. Inventory conducted prior to formal designation would help to identify sensitive areas for later management.

Impacts on Visual Resources

This alternative would have the least adverse impact to visual resources in either the short or long term.

Impacts on Forest Resources

A potential of 789 mbf/year sustainable yield on 10,850 acres of commercial forest land would be forgone if this alternative were chosen.

Impacts on Range Resources

Impacts on range resources would be the same as detailed in Alternative A.

Impacts on Wildlife and Fisheries Resources

Wilderness designation would result in more intensive habitat management adjacent to the WSA (e.g., clearcutting for forage production). This would result in a greater seasonal shift of elk and deer away from the WSA in late spring and summer to use this resource with a greater number of animals using the area in fall hunting season for security cover. The WSA would probably not be used by elk and deer to any significant degree in winter and early spring. Conversely the WSA is prime moose winter habitat. The same kind of more intensive habitat management outside the WSA given wilderness designation would result in a minor spring/summer shift of the moose away from the area in the short term and a major shift away in the long term. The base winter population of 25 to 30 animals would still use the area in the short and long term. Basically, the wildlife population shifting would occur not so much because of wilderness designation but rather due to increased intensity of habitat management outside the WSA to offset wilderness management inside.

Impacts on Socioeconomic Conditions

A total of 118 potential AUMs of grazing capacity and 789 mbf/year of timber harvest would be forgone, and 11,580 acres would be removed from future mineral entry or lease. There would also be some minimal loss of hunting expenditures due to the closure of one mile of vehicle way in the unit. Recreation on public lands would be expected to contribute about the same opportunities as in Alternative A.

WALES CREEK: ALTERNATIVE D

Impacts on Wilderness Resources

Under this alternative, the impacts would be the same as described in Alternative C on 4,900 acres in the Wales Creek drainage.

A total of 6,680 acres would be available for timber harvest; however, during the life of the plan, the acreage cut would be about the same amount as Alternative B. Therefore impacts would be similar.

Grazing would be the same as Alternative A.

Energy and mineral exploration and development on 6,680 acres could cause short and long-term impacts to wilderness values due to the use of motorized vehicles and surface disturbing activity at discovery sites including roads, drill pads, etc.

Wilderness values will receive protection on 4,900 acres of public lands allowing natural systems to continue with minimum impact from the development of other resources.

Utility and transportation corridor development would be considered only after careful study for 6,680

acres and, if a line or service road were to be built, could result in long-term impacts on solitude and naturalness by altering the landscape.

The 4,900 acres recommended suitable for wilderness in this alternative could be managed for the long term as wilderness.

Impacts on Soil and Water Resources

Road construction could cause short-term increases in sediment production in streams within the 6,680 acres recommended for nonwilderness.

Impacts on Energy and Mineral Resources

Wilderness designation will cause long-term impacts by excluding energy and mineral exploration and development on 4,900 acres.

This alternative would allow for the potential development of 40 unpatented mining claims in Yourname Creek and oil and gas leasing with special stipulations on 6,680 acres.

Impacts on Lands Program

Excluding transportation and utility corridor on 4,900 acres will cause a long-term decrease in possible corridor routes within the Garnet Resource Area.

Impacts on Recreation Resources

Timber harvest and road construction on 6,680 acres will have long-term impacts on dispersed recreation causing both a decrease in opportunities associated with undeveloped land and an increase in motorized recreation.

Wilderness designation for 4,900 acres will allow primitive recreation activity and backcountry hunting opportunities but would exclude motorized vehicle recreation from these lands.

Mineral development could cause both a short and long-term impact by disturbing recreation sites that lie within the 6,680 acres recommended for nonwilderness.

Impacts on Cultural Resources

Impacts on cultural resources would be the same as Alternative C except there would be more surface disturbing activities permitted on 6,680 acres. Increased resource management activities would stimulate discovery of cultural sites on that acreage but would also increase the potential for site destruction.

Impacts on Visual Resources

Timber harvest and road construction, oil and gas leasing with special stipulations, and possibly utility corridor development on 6,680 acres will cause long-term impacts that bring about some evident change in the landscape.

Mineral development on 6,680 acres will cause short-term impacts that bring about evident changes in the landscape.

Impacts on Forest Resources

Annual harvest will be reduced by 489 mbf over the long term due to wilderness on 4,900 acres much of which is classified as CFL.

Impacts on Range Resources

Wilderness designation would likely maintain the status of three AUMs licensed on 820 acres of the WSA. As an increase in grazing leasing is not contemplated under this alternative, there would be no impact on the range resource.

Impacts on Wildlife and Fisheries Resources

Management activities on 6,680 acres will cause long-term impacts to wildlife summer range by reducing security cover and old-growth timber stands, disturbing areas where young are reared, and increasing the destruction of habitat by road building and other resource development. The significance of these impacts would depend on the amount of road closure and limitations on timber harvest resulting from management direction on these 6,680 acres.

Mineral development if allowed in riparian habitat will destroy habitat for many wildlife species and disrupt streambeds.

Short-term impacts to fisheries habitat will be caused when road construction disturbs streambeds. Impacts on 4,900 acres would be the same as detailed in Alternative C.

Impacts on Socioeconomic Conditions

Selection of this alternative would benefit the economic picture by allowing for the harvest of up to 350 mbf of timber annually and the potential development of 40 unpatented mining claims in Yourname Creek. Forest management would create four primary jobs in the private sector cutting, planting, and improving timber stands as well as some secondary jobs processing the timber. Recreation on public lands would be expected to contribute about the same opportunities as in Alternative A.

WALES CREEK: ALTERNATIVE E

Impacts on Wilderness Resources

A total of 6,680 acres would be available for timber harvest; however, during the life of the plan the acreage cut would be about the same amount as Alternative B. Therefore, impacts would be similar.

The impact of grazing on wilderness would be the same as Alternative A.

Energy and mineral exploration and development on 6,680 acres could cause short and long-term impacts to wilderness values by use of motorized vehicles and development at discovery sites including roads, drill pads, etc.

Recreation restrictions on motorized vehicle use on 4,900 acres will protect solitude and naturalness values over most of the special management area.

Wilderness values will receive some protection on 4,900 acres recommended for special management as the management direction would tend to safeguard those values. This would allow natural systems to continue with minimum impact from the development of other resources.

Utility and transportation corridor development would be considered for 6,680 acres and, if a line or service road were to be built, could result in long-term impacts on solitude and naturalness by altering the landscape.

Impacts on Soil and Water Resources

The potential loss of highly erosive granitic soils and loss of water quality due to surface disturbing activities would be less likely to occur on 4,900 acres due to special management restrictions. Road construction on 6,680 acres will cause short-term increases in sediment production in streams.

Impacts on Energy and Mineral Resources

Mineral activities on 4,900 acres would be impacted by this alternative. The lands would be closed or would carry restrictive stipulations on oil and gas leasing. Mineral development potential is moderate and the WSA would remain open to mineral entry. There would be special stipulations on 6,680 acres.

Impacts on Lands Program

Restriction of transportation and utility corridors on 4,900 acres will cause a long term decrease in possible corridor routes in the Garnet Resource Area.

Impacts on Recreation Resources

Timber harvest and road construction on 6,680 acres will have long-term impacts on dispersed recreation causing both a decrease in opportunities associated with undeveloped land and an increase in motorized recreation.

Special management for 4,900 acres will allow for an increase in primitive recreation activity.

Impacts on Cultural Resources

Increased resource management activities would stimulate discovery of cultural sites on 6,680 acres. Less development on 4,900 acres would tend to safeguard undiscovered sites.

Impacts on Visual Resources

Timber harvest and road construction, oil and gas leasing with special stipulations, and utility corridor development on 6,680 acres could cause long-term impacts that bring about some evident change in the landscape.

Mineral development could cause short-term impacts that bring about evident changes in the landscape.

Impacts on Forest Resources

Timber available for annual harvest is reduced by 489 mbf over the long term due to special management on 4,900 acres, many of which are classified as CFL.

Impacts on Range Resources

In the short and long term, management actions would increase the AUMs available for livestock grazing on 6,680 acres due to improved vegetative condition and increased timber harvest. However, as this alternative calls for no increase in grazing in the area, these additional AUMs would not be utilized.

Impacts on Wildlife and Fisheries Resources

Special management on 4,900 acres would maintain or improve habitat quality over the long term.

Management activities on about 6,680 acres will cause long-term impacts to wildlife summer range by reducing security cover and old-growth timber stands, disturbing areas where young are reared, and increasing the destruction of habitat by road building and other resource development. The significance of these impacts would depend on the amount of road closure and limitations on timber harvest resulting from management direction on these 6,680 acres.

Mineral development if allowed in riparian habitat will destroy habitat for many wildlife species and disrupt streambeds.

Short-term impacts to fisheries habitat will be caused when road construction disturbs streambeds.

Impacts on Socioeconomic Conditions

Forest management on 6,680 acres would create four jobs in the private sector for timber harvest, planting, and timber stand improvement. Secondary jobs of processing the timber would also be created. Recreation on public lands would be expected to contribute about the same opportunities as in Alternative A.

HOODOO MOUNTAIN (SECTION 603): ALTERNATIVE A

Impacts on Wilderness Resources

The discussion of the trade-offs of wilderness versus special management outlined for Wales Creek, Alternative A would also be true for this WSA except that impacts would pertain to 11,380 acres.

Likewise, potential ecotype diversity and spatial distribution advantages to adding the WSA to the NWPS would be the same as in Wales Creek, Alternative A.

Grazing could occur in Hoodoo Mountain depending on management goals. Such activity, although an allowable nonconforming use in wilderness, is a sign of human presence. Operations such as the building of water storage reservoirs, the use of vehicles for cattle monitoring, etc. would have at least a periodic impact on natural and solitude values. No range improvements however are planned in this area. Likewise, vehicles allowed for other activities such as grazing, mining, or recreation, when in accordance with the management goals for the area, would have a similar adverse effect.

Conclusion

Nondesignation of the Hoodoo Mountain WSA along with administrative commitment to specially manage the area would likely result in protection of wilderness values on 11,380 acres in the short-term but some disruption of those values over the long term could occur depending on the management goals specified for the area.

Impacts on Forest Resources

Impacts on timber resources would be the same as Wales Creek, Alternative A except that the total CFL affected would be 9,078 acres in Hoodoo Mountain WSA.

Impacts on Range Resources

A total of 124 out of a potential 163 AUMs are being used in Hoodoo Mountain WSA at present. As grazing in this alternative is limited to existing use, there is a potential that 39 AUMs will not be available if this alternative is selected.

Impacts on Socioeconomic Conditions

As grazing and timber harvest will be dependent on the direction chosen for the special management area, economic gains from 39 potential AUMs of livestock grazing or 635 mbf annual timber cutting may not be realized. Recreation opportunity benefits would be the same as described in Alternative A for Wales Creek WSA.

Impacts to Other Resources

Impacts on soil, water, energy, mineral, lands, recreation, cultural, visual, wildlife, and fisheries resources are the same as discussed in Wales Creek, Alternative A except the impacts are on 11,380 acres in Hoodoo Mountain WSA.

HOODOO MOUNTAIN: ALTERNATIVE B

Impacts on Wilderness Resources

The discussion in Wales Creek, Alternative B on wilderness characteristics impact and on ecotype diversity and spatial distribution would also pertain to this area except on 11,380 acres.

Most of the 11,380 acres would be available for timber harvest. Cutting 635 mbf/year would cause a long term loss of naturalness and solitude values.

Timber harvest would create transitory range and allow grazing to increase on the 11,380 acres causing short and long-term impacts on wilderness values by expanding the need for motorized vehicles for herd management and for construction of range projects.

Energy and mineral exploration and development without special stipulations to protect solitude and natural values would cause short-term impacts, if no discoveries were made, from the use of motorized and seismic equipment. If discoveries were made, long-term impacts would result from access roads, drill pads, etc.

Utility and transportation corridor development in this WSA could result in long-term impacts on solitude and naturalness by altering the landscape and building the line and service road. The development would draw motorized use to the corridor.

Impacts on Soil and Water Resources

Soil and water resource impacts are the same as detailed in Wales Creek, Alternative B except on 11,380 acres. The effect of surface disturbing activities on water quality would possibly be significant in the wet areas of Cottonwood Meadows.

Impacts on Recreation Resources

Impacts are similar to those detailed in Wales Creek, Alternative B except that 635 mbf of annual timber harvest would result in a decrease in primitive recreation and an increase in motorized recreation.

Impacts on Range Resources

This alternative would allow the grazing of 184 AUMs. Impacts are similar to those described in Wales Creek, Alternative B.

Impacts on Forestry Resources

This alternative would allow the harvest of 635 mbf annually. Impacts are similar to those described in Wales Creek, Alternative B.

Impacts on Wildlife and Fisheries Resources

Wildlife impacts would be the same as detailed in Wales Creek, Alternative B except that there are no moose so a loss of moose habitat does not pertain in Hoodoo Mountain WSA and impacts would be on 11,380 acres.

Impacts on Socioeconomic Conditions

Economic impacts are similar to those detailed in Wales Creek, Alternative B except on 184 AUMs of grazing privilege and a timber harvest of 635 mbf. Timber harvest would create six jobs with a projected $119,904 in salaries.

Impacts on Other Resources

Impacts on energy, mineral, lands, cultural, and visual resources would be the same as discussed in Wales Creek, Alternative B except the impacts are on 11,380 acres in Hoodoo Mountain WSA.

HOODOO MOUNTAIN: ALTERNATIVE C

Impacts on Wilderness Resource

Impacts on wilderness would be the same as discussed in Wales Creek, Alternative C except the impacts would be on 11,380 acres in this WSA. Hoodoo Mountain WSA is considered to be manageable for wilderness in the long term with this alternative. However even with this alternative, boundaries set on ownership lines adjacent to private land rather than on identifiable topographic breaks could be unwittingly crossed by motorized vehicles with resultant adverse effects on solitude and naturalness.

Impacts on Energy and Mineral Resources

New mineral entries or oil and gas leases would be disallowed if this alternative were chosen. There are no present unpatented mineral claims in the WSA. If this alternative were chosen, there would be a loss of 11,380 acres of low to moderate potential metallic mineral resources.

Impacts on Recreation Resources

ORV closure on 11,380 acres would not greatly impact snowmobiles or four-wheeled motorized vehicle users as present use is largely confined to existing roads. A total of 4.1 miles of vehicle ways would be closed such that some degree of opportunity for motorized recreation would be forgone. Most of the recreation use at present is not motorized vehicle dependent so that the estimated 200 visits per year would not decrease and could increase due to interest in the wilderness, at least for the short term. The degree of increase is not known at this time. Wilderness designation for 11,380 acres will allow maintenance of existing primitive recreation activity and backcountry hunting opportunities.

Impacts on Forest Resources

A potential of 635 mbf/year sustainable yield on 9,078 acres of commercial forest land would be forgone if this option were chosen.

Impacts on Wildlife and Fisheries Resources

The discussion of impacts on elk and deer in Wales Creek, Alternative C would also pertain to Hoodoo Mountain. There is no moose habitat in this WSA, so there would be no impact on moose populations.

Impacts on Socioeconomic Conditions

There would be no gain of 39 potential AUMs grazing capacity, 635 mbf/year of timber harvest would be forgone, and 11,380 acres removed from future mineral entry or lease as well as some minimal loss of hunting expenditures due to the closure of 4.1 miles of vehicle way in the WSA. Recreation on public lands would be expected to contribute about the same opportunities as in Alternative A for Hoodoo Mountain WSA.

Impacts on Other Resources

Impacts on water, soils, lands, cultural, visual, and range resources would be the same as discussed in Wales Creek, Alternative C except the impacts are on 11,380 acres in Hoodoo Mountain WSA.

HOODOO MOUNTAIN: ALTERNATIVE D

Under this alternative the impacts for 5,873 acres would be similar for resources described in Alternative C for Hoodoo Mountain WSA. On 5,507 acres not recommended for wilderness, the impacts would be similar for resources described in Alternative B for Wales Creek WSA.

Impacts on Wilderness Resources

Under this alternative, the narrow neck of land in the WSA's configuration would be impossible to manage as wilderness if the adjoining private lands were developed.

HOODOO MOUNTAIN: ALTERNATIVE E

Impacts on Wilderness Resources

A total of 9,680 acres would be available for timber harvest; however, during the life of the plan the acreage cut would be about the same amount as Alternative B. Therefore, impacts would be similar.

The impact of grazing on wilderness would be the same as Alternative A.

Energy and mineral exploration and development on 9,680 acres could cause short and long-term impacts to wilderness values by use of motorized vehicles and development at discovery sites including roads, drill pads, etc.

Recreation restrictions on motorized vehicle use on 1,700 acres will protect solitude and naturalness values over most of the special management area.

Wilderness values will receive some protection on 1,700 acres recommended for special management as the management direction would tend to safeguard those values. This would allow natural systems to continue with minimum impact from the development of other resources.

Utility and transportation corridor development would be considered for 9,680 acres and, if a line or road were to be built, could result in long-term impacts on solitude and naturalness by altering the landscape.

Impacts on Soil and Water Resources

The potential loss of soils due to surface disturbing activities would not occur on 1,700 acres. Road construction on 9,680 acres will cause short-term increases in sediment production in streams.

Impacts on Energy and Mineral Resources

Mineral activities on 1,700 acres would be impacted by this alternative. The lands would be closed or would carry restrictive stipulations on oil and gas leasing. Mineral development potential is low and the area would remain open to mineral entry. There would be special stipulations on 9,680 acres.

Impacts on Lands Program

Restricting transportation and utility corridors on 1,700 acres will cause a long-term decrease in possible corridor routes.

Impacts on Recreation Resources

Timber harvest and road construction on 9,680 acres will have long-term impacts on dispersed recreation causing both a decrease in opportunities associated with undeveloped land use and an increase in motorized recreation.

Special designation for 1,700 acres will allow for primitive, nonmotorized recreation activity.

Impacts on Cultural Resources

Increased resource management activities stimulate discovery of cultural sites on 9,680 acres. Less development on 1,700 acres would tend to safeguard undiscovered sites.

Impacts on Visual Resources

Timber harvest and road construction, oil and gas leasing on 9,680 acres with special stipulations, utility corridor development on 9,680 acres will cause long-term changes in the visual characteristics of the area.

Mineral development will cause short-term impacts that bring about evident changes in the landscape.

Impacts on Forest Resources

The total CFL available for harvest is reduced over the long-term due to special designations on 1,700 acres, much of which is classified as CFL.

Impacts on Range Resources

In the short-term and long-term management actions would increase the AUMs available for livestock grazing on 9,680 acres due to improved vegetative

condition and increased timber harvest. Any increase in available AUMs on 1,700 acres would depend on special management direction prescribed for the area. The increase in AUMs in the Cottonwood drainage would not be all available for livestock use as portions of the drainage would not be open to an increase in grazing.

Impacts on Wildlife and Fisheries Resources

Special management on 1,700 acres would maintain or improve habitat quality over the long term.

Management activities on about 9,680 acres will cause long-term impacts to wildlife summer range by reducing security cover and old-growth timber stands, disturbing areas where young are reared, and increasing the destruction of habitat by road building and other resource development. The significance of these impacts would depend on the amount of road closure and limitations on timber harvesting resulting from management direction on these 9,680 acres.

Mineral development if allowed in riparian habitat will destroy habitat for many wildlife species and disrupt streambeds.

Short-term impacts to fisheries habitat will be caused when road construction disturbs streambeds.

Impacts on Socioeconomic Conditions

Forest management on 9,680 acres would create five jobs in the private sector for timber harvest, planting, and timber stand improvement. Secondary jobs of processing the timber would also be created. Recreation on public lands would be expected to contribute about the same opportunities as in Alternative A.

GALLAGHER CREEK (SECTION 202): ALTERNATIVE A

Impacts on Wilderness Resources

The management of the WSA as a special management area would prevent short-term degradation of wilderness values on all 4,257 acres. This alternative, however, would be less secure in its protection of wilderness values than would wilderness designation because surface disturbing resource uses would be allowable if in accordance with management goals.

Naturalness, solitude, and scenic values could be degraded or destroyed if surface disturbing activities such as fire suppression and mining operations were to occur. Likewise, vehicles allowed in accordance with management goals for other activities such as recreation and mining would have at least a periodic impact on natural and solitude values. Conversely, management goals for a special management area would likely protect wilderness values on much of the 4,257 acres.

Due to the small size of the 202 WSA and the abundant local supply of wilderness (3,431,339 acres in the region), nondesignation for this 202 WSA would have little effect on providing wilderness opportunities close to metropolitan areas or expanding the geographical distribution of the NWPS. Likewise, as all three ecosystems represented in the 202 WSA are well represented in the region and in the NWPS, its designation would not add to the diversity of the system (see Appendix Q).

Conclusion

Nondesignation of Gallagher Creek along with the establishment of a special management area would likely protect wilderness values on 4,257 acres in the short term. However, depending on management goals for the area, some disruption of these values could occur over the long term.

Impacts on Soil and Water Resources

The loss of highly erosive granitic soils due to surface disturbing activities on 4,257 acres would likely occur to only a minor degree if Best Management Practices were applied (see Appendix B). Impacts of mining activity, if allowed by special management goals, would adversely affect sedimentation and water quality on Gallagher Creek.

Impacts on Energy and Mineral Resources

The release of the 202 WSA from wilderness consideration may allow mineral exploration and development on 4,257 acres over the long term. Standard and special stipulations on oil and gas leases in the special management area would restrict exploration and development over the long term. However energy and mineral potentials are low.

Impacts on Lands Program

Restricting transportation and utility corridors on 4,257 acres would cause a long-term decrease in possible corridor routes in the Garnet Resource Area.

Impacts on Recreation Resources

Mineral development, if allowed, could cause both a short and long-term impact by disturbing scenery and recreation sites. Special management for 4,257 acres may result in an increase in primitive recreation opportunities.

Impacts on Cultural Resources

Although provisions for inventory, mitigation, or avoidance of impacts on cultural resources exist; surface disturbing activities could result in some disturbance or destruction of cultural values. Conversely, increased resource management activity will likely stimulate discovery of cultural sites.

Impacts on Visual Resources

Mineral development, if allowed, could cause short-term impacts that would bring about evident changes in the landscape.

Impacts on Forest Resources

The CFL (3,274 acres) within the 202 WSA would not be available for harvest in the short and long term.

Impacts on Range Resources

There is no authorized grazing in the 202 WSA at present. If the entire 4,257 acres were leased, 154 AUMs would be available. Grazing in this alternative is limited to existing use; therefore 154 potential AUMs would remain unleased.

Impacts on Wildlife and Fisheries Resources

Special management on 4,257 acres would maintain or slightly improve habitat quality over the long term if wildlife habitat improvement projects were allowed. If management goals did not allow such improvement projects, the habitat condition for elk can be expected to deteriorate as climax habitat increases in the 202 WSA. If mineral development is allowed in riparian habitat, the habitat for many wildlife species would be destroyed and streambeds disrupted.

Impacts on Socioeconomic Conditions

Economic gains from 154 potential AUMs of livestock grazing and 249 mbf annual timber harvest would not be available. The recreation opportunities provided under this alternative enhance the western lifestyle which incorporates backcountry activities and hunting.

GALLAGHER CREEK: ALTERNATIVE B

Impacts on Wilderness Resources

Selection of this alternative would give no special legislative protection to natural values on 4,257 acres. In the short term and long term alike, there would be some adverse effects on wilderness values. If resource development occurs, naturalness, solitude opportunities, and scenic values of those portions impacted would be permanently degraded or destroyed, affecting the wilderness qualities of the area.

A total of 3,274 acres of CFL would be available for timber management and 249 mbf would be cut annually. This would cause a long-term loss of naturalness and solitude values in portions of the 202 WSA.

Timber harvest would create transitory range allowing grazing to increase. This would cause both short and long-term impacts on wilderness values by expanding the need for motorized vehicles for herd management and for construction of range projects.

Energy and mineral exploration and development without special stipulations to protect solitude and natural values would cause short-term impacts, if no discoveries were made, from the use of motorized and seismic equipment. If discoveries were made, long-term impacts would result from access roads, pipelines, drill pads, etc.

Utility and transportation corridor development in this 202 WSA could result in long-term impacts on solitude and naturalness by altering the landscape and building the line and service road. The development would draw motorized use to the corridor.

Impacts on Soil and Water Resources

Unit management goals would not be able to mitigate the effects of surface disturbing activities on all 4,257 acres. Special practices would be required to prevent erosion on granitic soils.

Road construction from timber harvest and mining activities would cause short-term increases in sediment production in streams.

Impacts on Cultural Resources

Impacts on cultural resources under this alternative would be the same as Alternative A except there would likely be more surface disturbing activities permitted. This would result in more opportunity to discover cultural sites, but might result in an increase in site disturbance as well.

Impacts on Visual Resources

Mineral and forest resource development would cause short and long-term impacts that would bring about evident changes in the landscape.

Impacts on Forest Resources

This alternative would allow 249 mbf to be harvested annually and would permit the timely control of forest insect and disease outbreaks. This would protect the productivity of CFL both within and adjacent to Gallagher Creek.

Impacts on Range Resources

This alternative would allow the grazing of 154 AUMs. Forest harvest and mining activities which open up the forest canopy would allow an opportunity for an increase in grazing to use the transitory range thus created.

Impacts on Wildlife and Fisheries Resources

Wilderness benefits to wildlife such as decreased disturbance on elk and deer summer and fall habitat and natural vegetative changes would be forgone. There would be a loss of fall hunting season security cover depending on the goals of the timber harvest program. Wildlife could be displaced on 4,257 acres if the level of resource development exceeded an unquantifiable amount.

Management activities on about 4,257 acres will cause long-term impacts to wildlife summer and winter range by reducing security cover, thermal cover, and old-growth timber stands; disturbing riparian sites and areas where young are reared; increasing social intolerance and forage competition with livestock; and increasing the destruction of habitat by road building and other resource development.

Mineral development of riparian habitat will destroy habitat for many wildlife species and disrupt streambeds.

Short-term impacts to fisheries habitat would be caused by road construction disturbing streambeds.

Impacts on Socioeconomic Conditions

Selection of this alternative would benefit the economic picture by allowing for the grazing of 154 AUMs and the harvest of 249 mbf of timber annually. Forest management would create three primary jobs in the private sector for timber harvest, planting, and timber stand improvement. Secondary jobs of processing the timber would also be created.

Grazing management could contribute an increase in ranch income over the long term. Recreation on public lands will contribute about the same opportunities as in Alternative A. Mining on public lands will contribute jobs and money to the local economy.

GALLAGHER CREEK: ALTERNATIVE C

Impacts on Wilderness Resources

Selection of this alternative would best preserve the wilderness qualities on 4,257 acres in the Gallagher Creek 202 WSA. Its naturalness would be ensured over the long term and natural ecological changes would continue to occur. The 202 WSA's opportunities for solitude and primitive recreation would be best guaranteed for future visitor enjoyment. Preservation of wilderness values would in turn protect its scenic values. Potential ecotype diversity and spatial distribution advantages for adding the 202 WSA to the NWPS would be the same as in Alternative A. Gallagher Creek would not be manageable as wilderness. Its small size and topographical limitations preclude adequate screening of offsite impacts.

Impacts on Soil and Water Resources

Soil and water resources would be protected from degradation under this alternative.

Impacts on Energy and Mineral Resources

New mineral entries or oil and gas leases would be disallowed if this alternative were chosen. There also would be a loss of 4,257 acres of low potential energy and metallic mineral resources.

Impacts on Lands Program

Restricting transportation and utility corridors on 4,257 acres would cause a long-term decrease in possible corridor routes in the Garnet Resource Area.

Impacts on Recreation Resources

ORV closures on 4,257 acres would not impact snowmobiles or four-wheeled motorized vehicle users as present use is mostly confined to existing roads. Most of the recreation use at present is not dependent on motorized vehicles so that the estimated 100 visitors per year would not decrease and could increase due to interest in the wilderness, at least for the short term. The degree of increase is not known at this time. Wilderness designation for 4,257 acres will allow maintenance of existing primitive recreation activity and backcountry hunting opportunities.

Impacts on Cultural Resources

Selection of this alternative would result in far less surface disturbing activity and therefore a decrease in disturbance of cultural sites on 4,257 acres. There would possibly be some adverse effect on cultural resources from recreational use of the areas used by prehistoric and historic inhabitants of the area which also attract modern visitors. Inventory conducted prior to formal designation would help to identify sensitive areas for later management.

Impacts on Visual Resources

This alternative would have the least adverse impact to visual resources in either the short or long term.

Impacts on Forest Resources

A potential of 249 mbf/year sustainable yield on 3,274 acres of commercial forest land would be forgone if this alternative were chosen.

Impacts on Range Resources

Impacts on range resources would be the same as detailed in Alternative A.

Impacts on Wildlife and Fisheries Resources

Wilderness designation would result in more intensive habitat management adjacent to the 202 WSA such as clearcutting for forage production. This would result in a greater seasonal shift of elk and deer away from the 202 WSA in late spring and summer to use this additional forage with a greater number of animals using the area in fall hunting season for security cover. It would probably not be used by elk and deer to any significant degree in winter and early spring. Basically, the wildlife population shifting would occur not so much because of wilderness designation but rather due to increased intensity of habitat management outside the 202 WSA to offset wilderness management inside.

Impacts on Socioeconomic Conditions

A total of 154 potential AUMs of grazing capacity would not be available for livestock use, 249 mbf/year of timber harvest would be forgone, and 4,257 acres would be removed from future mineral entry or lease resulting in a net decrease of income to the area. Recreation on public lands would be expected to contribute about the same opportunities as in Alternative A.

GALLAGHER CREEK: ALTERNATIVE D

Impacts on Wilderness Resources

Under this alternative, the impacts would be the same as described in Alternative C on 3,577 acres in the Gallagher Creek drainage.

A total of 680 acres would be available for timber harvest. Impacts would be similar to those detailed in Alternative B.

Grazing would be the same as Alternative A.

Energy and mineral exploration and development on 680 acres would cause short and long-term impacts to wilderness values by use of motorized vehicles and development at discovery sites including roads, drill pads, etc.

Wilderness values will receive protection on 3,577 acres of public lands allowing natural systems to continue with minimum impact from the development of other resources.

Utility and transportation corridor development would be considered only after careful study for 680 acres and, if a line or service road were to be built, could result in long-term impacts on solitude and naturalness by altering the landscape.

Gallagher Creek would not be manageable as wilderness in the long term. Its small size and topographical limitations preclude adequate screening of offsite impacts.

Impacts on Soil and Water Resources

Road construction could cause short-term increases in sediment production in streams within the 680 acres recommended for nonwilderness.

Impacts on Energy and Mineral Resources

Wilderness designation will cause long-term impacts by excluding energy and mineral exploration and development on 3,577 acres in the low potential area.

This alternative would allow oil and gas leasing with special stipulations on 680 acres.

Impacts on Lands Program

Excluding transportation and utility corridors on 3,577 acres will cause a long-term decrease in possible corridor routes within the Garnet Resource Area.

Impacts on Recreation Resources

Timber harvest and road construction on 680 acres will have long-term impacts on dispersed recreation causing both a decrease in opportunities associated with undeveloped land and an increase in motorized recreation.

Wilderness designation for 3,577 acres will allow primitive recreation activity and backcountry hunting opportunities but would exclude motorized vehicle recreation from these lands.

Impacts on Cultural Resources

Impacts on cultural resources would be the same as Alternative C except there would be more surface disturbing activities permitted on 680 acres. Increased resource management activities would stimulate discovery of cultural sites on that acreage but would also increase the potential for site destruction.

Impacts on Visual Resources

Timber harvest and road construction, oil and gas leasing with special stipulations, and possibly utility corridor development on 680 acres will cause long-term impacts that bring about some evident change in the landscape.

Mineral development on 680 acres will cause short-term impacts that bring about evident changes in the landscape.

Impacts on Forest Resources

The annual forest harvest is reduced over the long term due to wilderness on 3,577 acres many of which are classified as CFL.

Impacts on Range Resources

Wilderness designation would likely maintain the status of no authorized grazing. As an increase in grazing leasing is not contemplated under this alternative, there would be no impact on the range resource.

Impacts on Wildlife and Fisheries Resources

Management activities on 680 acres will cause long-term impacts to wildlife summer range by reducing security cover and old-growth timber stands, disturbing areas where young are reared, and increasing the destruction of habitat by road building and other resource development. The significance of those impacts would depend on the amount of road closure and limitations on timber harvest resulting from management on those 680 acres.

Mineral development, if allowed in riparian habitat, will destroy habitat for many wildlife species and disrupt streambeds.

Short-term impacts to fisheries habitat will be caused when road construction disturbs streambeds. Impacts on 3,577 acres would be the same as detailed in Alternative C.

Impacts on Socioeconomic Conditions

Selection of this alternative would benefit the economic picture by allowing for mining and timber harvest on 680 acres. Forest management would create one primary job in the private sector cutting, planting, and improving timber stands as well as some secondary jobs processing the timber. Recreation on public lands would be expected to contribute about the same opportunities as in Alternative A.

GALLAGHER CREEK: ALTERNATIVE E

Impacts on Wilderness Resources

A total of 2,500 acres of CFL would be available for timber harvest; however, during the life of the plan the acreage cut would be about the same amount as Alternative B. Therefore, impacts would be similar.

The impact of grazing on wilderness would be the same as Alternative A.

Energy and mineral exploration and development on 3,257 acres could cause short and long-term impacts to wilderness values by use of motorized vehicles and development at discovery sites including roads, drill pads, etc.

Recreation restrictions on motorized vehicle use on 1,000 acres will protect solitude and naturalness values over some of the special management area.

Wilderness values will receive some protection on 1,000 acres recommended for special management as the management direction would tend to safeguard those values. This would allow natural systems to continue with minimum impact from the development of other resources.

Utility and transportation corridor development would be considered for 3,257 acres and, if a line or service road were to be built, could result in long-term impacts on solitude and naturalness by altering the landscape.

Impacts on Soil and Water Resources

The potential loss of soils and water quality due to surface disturbing activities would be less likely to occur on 3,257 acres due to special management restrictions. Road construction on 3,257 acres will cause short-term increases in sediment production in streams.

Impacts on Energy and Mineral Resources

Mineral activities on 1,000 acres would be impacted by this alternative. The lands would be closed or would carry restrictive stipulations on oil and gas leasing. Mineral development potential is low and the 202 WSA would remain open to mineral entry. There would be special stipulations on 3,257 acres.

Impacts on Lands Program

Restrictions on transportation and utility corridors on 4,257 acres will cause a long term decrease in possible corridor routes in the Garnet Resource Area.

Impacts on Recreation Resources

Timber harvest and road construction on 3,257 acres will have long-term impacts on dispersed recreation causing both a decrease in opportunities associated with undeveloped land and an increase in motorized recreation.

Special management for 1,000 acres will allow for an increase in primitive recreation activity.

Impacts on Cultural Resources

Increased resource management activities would stimulate discovery of cultural sites on 3,257 acres. Less development on 1,000 acres would tend to safeguard undiscovered sites.

Impacts on Visual Resources

Timber harvest and road construction, oil and gas leasing with special stipulations, and utility corridor development on 3,257 acres could cause long-term impacts that bring about some evident change in the landscape.

Mineral development could cause short-term impacts that bring about evident changes in the landscape.

Impacts on Forest Resources

The total CFL available for harvest is reduced over the long-term due to special management on 1,000 acres.

Impacts on Range Resources

In the short and long term, management actions would increase the AUMs available for livestock grazing on 3,257 acres due to improved vegetative condition and increased timber harvest. However as this alternative calls for no increase in grazing in the area, those additional AUMs would not be utilized.

Impacts on Wildlife and Fisheries Resources

Special management on 1,000 acres would maintain or improve habitat quality over the long term.

Management activities on about 3,257 acres will cause long-term impacts to wildlife summer range by reducing security cover and old-growth timber stands, disturbing areas where young are reared, and increasing the destruction of habitat by road building and other resource development. The significance of these impacts would depend on the amount of road closure and limitations on timber harvest resulting from management direction on those 3,257 acres.

Mineral development, if allowed in riparian habitat, will destroy habitat for many wildlife species and disrupt streambeds.

Short-term impacts to fisheries will be caused when road construction disturbs streambeds.

Impacts on Socioeconomic Conditions

Forest management on 3,257 acres would create some jobs in the private sector for timber harvest, planting, and timber stand improvement. Secondary jobs of processing the timber would also be created. Recreation on public lands would be expected to contribute about the same opportunities as in Alternative A.

QUIGG WEST (SECTION 202): ALTERNATIVE A

Impacts on Wilderness Resources

The opportunity for the Forest Service and Congress to consider this tack-on as an addition to their RARE II Quigg area would be forgone with this alternative. Although Quigg West would add to the diversity, scenic quality, and wilderness quality of the adjoining national forest land now under wilderness study, it would not enhance its manageability or boundary configuration.

The management of the WSA as a special management area would prevent short-term degradation of wilderness values on all 520 acres. This alternative, however, would be less secure in its protection of wilderness values than would wilderness designation because surface disturbing resource uses would be allowable if in accordance with management goals.

Naturalness, solitude, and scenic values could be degraded or destroyed if surface disturbing activities such as fire suppression and mining operations were to occur. Likewise, vehicles allowed in accordance with management goals for activities such as recreation and mining would have at least a periodic impact on natural and solitude values. Conversely, management goals for a special management area would likely protect wilderness values on much of the 520 acres.

Due to the small size of the 202 WSA and the abundant local supply of wilderness (3,431,339 acres in the region), nondesignation for this 202 WSA would have little effect on providing wilderness opportunities close to metropolitan areas or expanding the geographical distribution of the NWPS. Likewise, as all three ecosystems represented in the 202 WSA are well represented in the region and in the NWPS, its designation would not add to the diversity of the system (see Appendix Q).

Conclusion

Nondesignation of Quigg West along with the establishment of a special management area would likely protect wilderness values on 520 acres in the short term. However, depending on management goals for the area, some disruption of these values could occur over the long term.

Impacts on Soil and Water Resources

The loss of soils due to surface disturbing activities on 520 acres would likely occur to only a minor degree if Best Management Practices were applied (see Appendix B). Impacts of mining activity, if allowed by special management goals, would adversely affect sedimentation and water quality in the Rock Creek drainage.

Impacts on Energy and Mineral Resources

The release of the 202 WSA from wilderness consideration may allow mineral exploration and development on 520 acres over the long term. Standard and special stipulations on oil and gas leases in the special management area would restrict exploration and development over the long term.

Impacts on Lands Program

Restricting transportation and utility corridors on 520 acres would cause a slight long-term decrease in possible corridor routes in the Garnet Resource Area.

Impacts on Recreation Resources

Mineral development, if allowed, could cause both a short and long-term impact by disturbing scenery and recreation sites. Special management for 520 acres may result in an increase in primitive recreation opportunities.

Impacts on Cultural Resources

Although provisions for inventory, mitigation, or avoidance of impacts on cultural resources exist; surface disturbing activities could result in some disturbance or destruction of cultural values. Conversely, increased resource management activity will likely stimulate discovery of cultural sites.

Impacts on Visual Resources

Mineral development, if allowed, could cause short-term impacts that would bring about evident changes in the landscape.

Impacts on Forest Resources

The CFL on 284 acres within the 202 WSA would not be available for harvest in the short and long term.

Impacts on Range Resources

There is no authorized grazing in the tack-on at present. If the entire 520 acres were leased, 20 AUMs would be available. Grazing in this alternative is limited to existing use; therefore 20 potential AUMs would remain unleased.

Impacts on Wildlife and Fisheries Resources

Special management on 520 acres would maintain or slightly improve habitat quality over the long term if wildlife habitat improvement projects were allowed. If management goals did not allow such improvement projects, the habitat condition for deer and elk can be expected to deteriorate as climax habitat increases in the 202 WSA. If mineral development is allowed in riparian habitat, the habitat for many wildlife species would be destroyed and streambeds disrupted.

Impacts on Socioeconomic Conditions

Economic gains from 20 potential AUMs of livestock grazing and 15 mbf annual timber harvest would not be available. The recreation opportunities provided under this alternative enhance the western lifestyle which incorporates backcountry activities and hunting.

QUIGG WEST: ALTERNATIVE B

Impacts on Wilderness Resources

Selection of this alternative would give no special legislative protection to natural values on 520 acres. In the short term and long term alike, there would be some adverse effects on wilderness values. If resource development occurs, naturalness, solitude opportunities, and scenic values of those portions impacted would be permanently degraded or destroyed, affecting the wilderness qualities of this tack-on.

Most of the 284 acres of CFL would be available for timber management and 15 mbf would be cut annually. This would cause a long-term loss of naturalness and solitude values.

Timber harvest would create transitory range allowing grazing to occur. This would cause both short and long-term impacts on wilderness values by expanding the need for motorized vehicles for herd management and for construction of range projects.

Energy and mineral exploration and development without special stipulations to protect solitude and natural values would cause short-term impacts, if no discoveries were made, from the use of motorized and seismic equipment. If discoveries were made, long-term impacts would result from access roads, drill pads, etc.

Utility and transportation corridor development in this 202 WSA could result in long-term impacts on solitude and naturalness by altering the landscape and building the line and service road. The development would draw motorized use to the corridor.

Impacts on Soil and Water Resources

Unit management goals would not be able to mitigate the effects of surface disturbing activities on all 520 acres. Special practices would be required to prevent soil erosion.

Road construction from timber harvest and mining activities would cause short-term increases in sediment production in streams.

Impacts on Energy and Mineral Resources

This alternative would allow the greatest degree of unrestricted energy and mineral exploration and development.

Impacts on Lands Program

There would be no restrictions on possible siting of transportation or utility corridors on any of the 520 acres of this area.

Impacts on Recreation Resources

Those opportunities associated with a roadless experience would be forgone.

Timber harvest of 15 mbf annually and associated road construction will have long-term impacts on dispersed recreation causing both a decrease in recreation opportunities associated with undeveloped land and an increase in motorized recreation.

Mineral, oil and gas, and transportation and utility corridor development could cause short and long-term impacts by disturbing recreation sites.

Opening the area for multiple use would cause a long-term increase in seasonal motorized recreation and long-term decrease in primitive recreation.

Impacts on Cultural Resources

Impacts on cultural resources under this alternative would be the same as Alternative A except there would likely be more surface disturbing activities permitted. This would result in more opportunity to discover cultural sites, but might result in an increase in site disturbance as well.

Impacts on Visual Resources

Mineral and forest resource development would cause short and long-term impacts that would bring about evident changes in the landscape.

Impacts on Forest Resources

This alternative would allow 15 mbf to be harvested annually and would permit the timely control of forest insect and disease outbreaks. This would protect the productivity of CFL both within and adjacent to Quigg West.

Impacts on Range Resources

This alternative would allow the grazing of 20 AUMs. Forest harvest and mining activities which open up the forest canopy would allow an opportunity for an increase in grazing to use the transitory range thus created.

Impacts on Wildlife and Fisheries Resources

Wilderness benefits to wildlife such as decreased disturbance on elk and deer summer and fall habitat and natural vegetative changes would be forgone. The bighorn sheep population would likely be disturbed or displaced. There would be a loss of fall hunting season security cover depending on the goals of the timber harvest program. Wildlife could be displaced on 520 acres if the level of resource development exceeded an unquantifiable amount.

Management activities on about 520 acres will cause long-term impacts to wildlife summer and winter range by reducing security cover, thermal cover, and old-growth timber stands; disturbing riparian sites and areas where young are reared; increasing social intolerance and forage competition with livestock; and increasing the destruction of habitat by road building and other resource development.

Mineral development of riparian habitat will destroy habitat for many wildlife species and disrupt streambeds.

Impacts on Socioeconomic Conditions

Selection of this alternative would benefit the economic picture by allowing for the grazing of 20 AUMs and the harvest of 15 mbf of timber annually. Forest management would create some primary jobs in the private sector for timber harvest, planting, and timber stand improvement. Secondary jobs of processing the timber would also be created.

Grazing management could contribute an increase in ranch income over the long term. Recreation on public lands will contribute about the same opportunities as in Alternative A. Mining on public lands will contribute jobs and money to the local economy.

QUIGG WEST: ALTERNATIVES C, D, AND E

Impacts on Wilderness Resources

Selection of this alternative would best preserve the wilderness qualities on 520 acres in the Quigg West 202 WSA. Its naturalness would be ensured over the long term and natural ecological changes would continue to occur. The 202 WSA's exceptional opportunities for solitude and primitive recreation in conjunction with the adjacent Forest Service RARE II area would be best guaranteed for future visitor enjoyment. Preservation of wildlife values would in turn protect its scenic values. Potential ecotype diversity and spatial distribution advantages for adding the 202 WSA to the NWPS would be the same as Alternative A.

The 520-acre 202 WSA would only be manageable in conjunction with the 60,500-acre Forest Service RARE II area, Quigg.

Impacts on Soil and Water Resources

Soil and water resources would be protected from degradation.

Impacts on Energy and Mineral Resources

New mineral entries or oil and gas leases would be disallowed if this alternative were chosen. There also would be a loss of 520 acres of low potential energy and medium potential metallic mineral resources.

Impacts on Lands Program

Restricting transportation and utility corridors on 520 acres would cause a slight long-term decrease in possible corridor routes in the Garnet Resource Area.

Impacts on Recreation Resources

ORV closures on 520 acres would not impact snowmobiles or four-wheeled motorized vehicle users as there is no present use. Recreation use is not dependent on motorized vehicles so that the estimated 25 visitors per year would not decrease and could increase due to interest in the wilderness, at least for the short term. The degree of increase is not known at this time. Wilderness designation for 520 acres will allow maintenance of existing primitive recreation activity and backcountry hunting opportunities.

Impacts on Cultural Resources

Selection of this alternative would result in far less surface disturbing activity and therefore a decrease in disturbance of cultural sites on 520 acres. There would possibly be some adverse effect on cultural resources from recreational use of the portions of the 202 WSA used by prehistoric, historic, and modern visitors alike. Inventory conducted prior to formal designation would help to identify sensitive areas for later management.

Impacts on Visual Resources

This alternative would have the least adverse impact to visual resources in either the short or long term.

Impacts on Forest Resources

A potential of 15 mbf/year sustainable yield on 284 acres of commercial forest land would be forgone if this alternative were chosen.

Impacts on Range Resources

Impacts on range resources would be the same as detailed in Alternative A.

Impacts on Wildlife and Fisheries Resources

Wilderness designation could result in more intensive habitat management adjacent to the 202 WSA such as clearcutting for forage production. This would result in a greater seasonal shift of elk and deer away from the 202 WSA in late spring and summer to use this new forage with a greater number of animals using the area in fall hunting season for security cover. It would probably not be used by elk and deer to any significant degree in winter and early spring. Basically, the wildlife population shifting would occur not so much because of wilderness designation but rather due to increased intensity of habitat management outside the 202 WSA to offset wilderness management inside. This alternative would best protect the bighorn sheep herd, which is dependent on a natural, quiet environment.

Impacts on Socioeconomic Conditions

The income from 20 potential AUMs of grazing capacity and 15 mbf/year of timber harvest would be forgone, and 520 acres would be removed from future mineral entry or lease. Recreation on public lands would be expected to contribute about the same opportunities as in Alternative A.

Appendix O	233	title of Appendix O	Change "STUDIES" to **STUDIED**.
	234	WSA locations	Change "Gallagher Mtn" to **Wales Creek** and "Wales Creek" to **Gallagher Creek**.
	243	Gallagher Creek, second sentence	Delete the phrase, "and optimal use of the range resources."
	245	Alternative E, Timber Harvest, second sentence	Change sentence to read, **Timber harvest on 19,617 acres will be consistent with wildlife habitat management objectives**.
	248	Alternative A, Wilderness	Change "11,500" to **11,580**.
	248	Visual and Forest Resources	Add a line across the page to divide these two issues.
	248	Alternative A, Range, second sentence	Change the location of the sentence to the Wildlife and Fisheries row of Alternative A.
	248	Alternative A, Wildlife and Fisheries, second sentence	Change the location the the sentence to the Socioeconomic row of Alternative A.
	248	Alternative A, Socioeconomic	Change "11,380" to **11,580**.
	253	Range, Wildlife and Fisheries, Alternative C to E	Add a dividing line between the issues extending from page 252.
	253	Socioeconomic, Alternative E	Change "118" to **154**.
	257	Table 0-8	Change the table to read,

TABLE O-8

EFFECTS ON NATURALNESS
WALES CREEK WSA

Feature	Legal Location	Length/Area	Impact	Remarks
Wales Cr. Fire Rd.	T13N, R13W Sec. 12,14,15	Approx. 3.3 mi.	High	This road is a cherrystem entering the WSA
Yourname Cr. Rd.	T13N, R12W, Sec. 17,18; T13N, R13W, Sec. 13,22,23	Approx. 3.6 mi.	High	This road is a cherrystem entering the WSA
Vehicle Way off Elevation Mtn. Rd.	T13N, R13W, Sec. 21, NW¼	Approx. 1/2 mi.	Low	
	T13N, R13W, Sec. 28, N½	1/4 mi.	Low	
Vehicle Way off Wales Cr. Fire Rd.	T13N, R13W Sec. 14, SW¼	Approx. 125 yds.	Low	Leads to spring
Thinnings (2)	T13N, R13W, Sec. 21	Under 1 ac.	Low	Largely unnoticeable
Old fire line	T13N, R13W, Sec. 13,24	Approx. 1/2 mi.	Low	Visible from the air
Spur to cabin at head of Yourname	T13N, R13W, Sec. 22	1/8 mi.	Low	Leads to old mining operation
Old cabin	T13N, R13W, Sec. 22	Under 1 ac.	Low	Partially collapsed
Prospect hole (assoc. with old cabin)	T13N, R13W, Sec. 22	Under 1 ac.	Low	
Line fence	T13N, R13W, Sec. 25	Approx. 1/4 mi.		
Chamberlain Mtn. Rd.	T13N, R13W, Sec. 3,4	Approx. 1/4 mi.		Cherrystem for about 3/4 mi.

Section	Page Number	Location	Change
	259	Outstanding Opportunities, second sentence	Delete "larch,"
	260	Energy and Minerals, second sentence	Change sentence to read, "**Its** bedrock consists of a thick series of sedimentary rocks which are folded and faulted."
	260	Energy and Minerals, fourth sentence	Change sentence to read, "**Younger extrusive** volcanic rocks cover large parts of the WSA."
	261	Forest Resources, first paragraph, last sentence	Change "707" to **789**.
	265	Soil and Water Resources, fifth sentence	Add the phrase **within the WSA boundaries** between the words "creek" and "because".
	265	Energy and Minerals, first sentence	Delete the first 17 words and change the sentence to read, "The discussion of energy and minerals for **the Wales Creek** WSA is also applicable to Hoodoo Mountain with the exception that it has no unpatented mining claims."
	265	Energy and Minerals, second paragraph, second sentence	Change the sentence to read, "Much of the area is covered by **extrusive volcanics** which **make mineral** resource assessment difficult."
	266	Range Resources, fourth sentence	Change "186" to **184**.
	269	Energy and Minerals, first sentence	Delete the first 18 words and change the sentence to read, "The discussion of energy and minerals for the **Wales Creek** WSA is also applicable to Gallagher Creek with the exception that it has no unpatented mining claims."
	269	Energy ad Minerals, third sentence	Change "lava" to **extrusive volcanics**.
	270	Big Game Species, second sentence	Change "cover" to **areas**.
	270	Big Game Species, second paragraph, second sentence	Change "security habitat" to **hiding cover**.
	270	Social and Economic Conditions, first paragraph, last sentence	Change "bisecting" to **adjacent**.
	271	Energy and Minerals, first paragraph, last sentence	Delete entire sentence.
	273	Impacts on Wilderness Resources, second paragraph, first sentence	Change "10,683" to **10,850**.
	274	Impacts on Wildlife and Fisheries Resources, second sentence	Change "cover" to **areas**.
	275	Impacts on Wildlife and Fisheries Resources, second sentence	Change "cover" to **areas**.

275, 283, 289	Impacts on Lands Program	Change "Restricting" to **Exclusion of.**
276	Impacts on Wildlife and Fisheries Resources, first sentence	Change "cover" to **areas.**
277	Impacts on Wildlife and Fisheries Resources, second paragraph, first sentence	Change "cover" to **areas.**
278	Impacts on Range Resources, first sentence	Change "163" to **184.**
278	Impacts on Range Resources, second sentence	Change "39" to **60.**
279	Impacts on Socioeconomic Conditions, first sentence	Change "39" to **60.**
281	Impacts on Wildlife and Fisheries Resources, second paragraph, first sentence	Change "cover" to **areas.**
281	Impacts on Soil and Water Resources, first sentence	Delete the words "highly erosive granitic."
282	Impacts on Soil and Water Resources, second sentence	Change sentence to read, "Special practices would be required to prevent erosion **of** soils."
282	End of page	Add, **IMPACTS ON RECREATION RESOURCES** **There will be a decrease in opportunities for primitive recreation and an increase in motorized recreation on 4,257 acres.**
283, 284	Impacts to Wildlife and Fisheries Resources, second sentence	Change "cover" to **areas.**
285	Impacts on Wildlife and Fisheries Resources, first sentence	Change "cover" to **areas.**
285	Impacts to Soil and Water Resources, first sentence	Change "3,257" to **1,000.**
286	Impacts on Wildlife and Fisheries Resources, second paragraph, first sentence	Change "cover" to **areas.**
288	Impacts on Wildife and Fisheries Resources, third sentence	Change "cover" to **areas.**
289	Impacts on Wildlife and Fisheries Resources, second sentence	Change "cover" to **areas.**