



U.S. Department of the Interior
Bureau of Land Management

Vale District Office
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Vale, Oregon 97918

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April 1994



Proposed Amendment of the Northern **Malheur** Management Framework Plan and Proposed ACEC Management Plan

and Environmental Assessment
OR-030-94-02 for Leslie Gulch Area
of Critical Environmental Concern (ACEC)

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our **land** and water resources, protecting **our** fish and wildlife, preserving the environmental and cultural values of our national parks and historical **places**, and **providing** for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American **Indian reservation** communities and for people who live in **Island** Territories under U.S. administration.

BLM/OR/WA/PL-94/16+1792



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vale District Office
100 Oregon Street
Vale, Oregon 97918



IN REPLY REFER TO:

1613

Dear Concerned Citizen:

These proposed plans are the fourth in a series of five documents that will establish management direction for the Leslie Gulch Area of Critical Environmental Concern (ACEC).

To save time and reduce duplication of information, two plans are included in this one document. The Proposed Northern Malheur Management Framework Plan (MFP) Amendment makes the necessary changes to the MFP needed to protect and enhance the ACEC. The Proposed Leslie Gulch ACEC Management Plan is based on the MFP and proposed amendment and provides more specific guidance for managing the ACEC.

Each plan has a separate protest procedure described at the end of its respective section. The period for filing a protest to either plan begins when the Notice of Availability of the proposed plans is published in the Federal Register. The protest period extends for 30 days.

The final phase of the planning process will be to issue a decision record following resolution of any protests. The decision record will be forwarded to all persons who participated in the Leslie Gulch planning effort and will be available at the Vale District Office.

Sincerely,

Ralph Hitt
Malheur Resource Area Manager

Enclosure:

Plans, as described above

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Readers Guide

This document contains four major sections. Each section is color coded to improve recognition.

This first 'white section provides an introduction to the document and the general background for the proposed amendment to the Northern Malheur Management Framework Plan (MFP) and the proposed ACEC Management Plan.

The first green section presents the proposed amendments to the Northern Malheur MFP which will be required to implement a portion of the management actions proposed for the Leslie Gulch ACEC. The MFP is the land use plan which guides management of public lands in the northern half of Malheur County, including the Leslie Gulch ACEC.

The second white section contains the remainder of the proposed ACEC management actions which do not require MFP amendments.

The second green section is Appendix I. This section is the implementation schedule for the management actions which are contained in the proposed MFP amendments and proposed Management Plan sections.

The third white section is Appendix II. This section contains the Environmental Assessment (EA) which has been amended in response to public comment. This document was mailed for public review in early January, 1994. The EA contains a Glossary and Literature Cited sections and has a table of contents which is specific to this section.

The third green section contains Appendix III. This section is a summary of the comments received and responses to specific comments received pertaining to the EA.

Abstract

This document provides the blueprint for special management attention to the Relevant and Important Values of the Leslie Gulch Area of Critical Environmental Concern (ACEC). There are three Relevant and Important Values for which the Leslie Gulch ACEC was designated in 1983: (1) special status plant species and their habitats, (2) the area's outstanding scenery, and (3) California bighorn sheep habitat.

The Reader's Guide sections provide guidance on how to use this document. The major sections of this document are the proposed Management Framework Plan (MFP) amendments and the proposed ACEC Management Plan. These plans describe specific proposed management actions that would protect the Relevant and Important Values while providing for compatible use of the ACEC for the next 10 to 20 years.

Under the proposed decisions to amend the Northern Malheur MFP, the BLM would: (1) acquire a 40 acre private parcel from a willing seller, (2) eliminate livestock grazing in most of the ACEC by transferring 264 animal unit months to other pastures of the same grazing allotment, (3) remove the ACEC from the Three Fingers Wild Horse Management Area, (4) close the ACEC to recreational domestic livestock use, (5) limit motorized vehicle access on 0.8 miles of the Dago Gulch Road, (6) correct the acreage **calculated** for the ACEC, (7) limit the ACEC to day use only outside the Slocum Creek Campground, (8) eliminate the installation of rock climbing fixed anchors, and, (9) eliminate vegetation and mineral gathering.

The ACEC Management Plan identifies the remaining proposed decisions that do not require an amendment to the MFP. The proposed decisions are described under nine management topics: road access and maintenance, minerals, noxious weeds, special status plants, wildlife, wildfire, livestock grazing, wilderness study areas, and recreation. The management actions have been designed to minimize impacts to the Relevant and Important Values of the ACEC while allowing compatible use. Resource condition monitoring will be used to identify impacts from ACEC uses and the plan prescribes use restrictions to mitigate impacts.

The public has been asked for comments on three separate occasions: scoping, alternatives analysis, and environmental assessment. The general tone of most of the comment letters indicate the area is viewed as particularly sensitive to human activities and is worthy of having its unique plant life and natural beauty maintained in a minimally developed setting. More than three quarters of the respondents to the environmental assessment favored the proposed action or slight variations of it. Most of the remainder of the respondents opposed transferring grazing out of the Leslie Gulch pasture.

Acronyms

ACEC - Area of Critical Environmental Concern

AUM - Animal Unit Month

BOR - Bureau of Reclamation

CA - Conservation Agreement

EA - Environmental Assessment

EIS - Environmental Impact Statement

FLPMA - Federal Land Policy and Management Act

HMA - Herd Management Area

HMP - Habitat Management Plan

IMP - Interim Management Policy and Guidelines for Lands under Wilderness Review

MFP - Management Framework Plan

MOU - Memorandum of Understanding

NEPA - National Environmental Policy Act

ODFW - Oregon Department of Fish and Wildlife

OHV - Off Highway Vehicle

PUP - Pesticide Use Proposal

ROS - Recreation Opportunity Spectrum

RPS - Range Program Summary

SRMA - Special Recreation Management Area

VRM - Visual Resource Management

WSA - Wilderness Study Area

Chapter 1 - Introduction

Areas are designated as **ACECs** when special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and provide safety from natural hazards. The Federal Land Policy and Management Act requires that the BLM give priority to the designation and protection of **ACECs**.

To be designated as an ACEC, an area must meet the criteria of "Relevance" and "Importance". To meet the "Relevance" criterion for ACEC designation, an area must have characteristics such as significant scenic values or habitat for sensitive or threatened animal or plant species. The Relevant Values or resources identified must also have substantial significance to meet the "importance" criteria for ACEC designation. This means that the values identified must be more than locally significant and must have qualities which make the area fragile, sensitive, unique or vulnerable to adverse change.

Leslie Gulch was designated an Area of Critical Environmental Concern (ACEC) in 1983 in the Northern Malheur Management Framework Plan (MFP). This **11,653-acre** ACEC was identified to protect the Relevant and Important Values of high quality scenery, California bighorn sheep habitat and special status plant species habitat. The objectives for management within the ACEC are to protect, conserve and enhance these values while authorizing the various activities which occur within the area.

Purpose And Need

The purpose of this document is three fold. First, proposed amendments to the Northern Malheur Management Framework Plan are presented; second, management actions to provide management direction for the Leslie Gulch ACEC are proposed; and third, the Environmental Assessment is amended to reflect public comment received.

This proposed MFP amendment, proposed ACEC Management Plan and associated Environmental Assessment (EA) are required by the Federal Land Policy and Management Act (FLPMA) of 1976 and the National Environmental Policy Act (NEPA) of 1969 which provides for public involvement and state and local government coordination. The management

plan will provide guidance for management of the ACEC for the next ten to twenty years. The MFP amendments will remain in effect until a new comprehensive resource management plan is developed for the Malheur Resource Area.

Setting

Leslie Gulch drains into the Owyhee Reservoir approximately 50 miles south of Ontario, Oregon, and 60 miles southwest of Boise, Idaho. The mouth of the gulch is at approximately 2600 feet above sea level, and the highest elevation is approximately 5300 feet on the eastern boundary of the ACEC. The boundary of the ACEC is generally defined by the watershed boundaries of Leslie, Slocum, Juniper, Dago and Runaway Gulches and their tributaries. The ACEC covers approximately 11,653 acres. Much of the southern boundary of the ACEC is the boundary between public and private lands to the south on Mahogany Mountain. Bureau of Reclamation (BOR) lands abut the west boundary of the ACEC near the Owyhee Reservoir.

The climate of the area is similar to that of the Great Basin and is one of extremes. Winter low temperatures can range well below zero, but typically are between 10 and 30 degrees. During the summer, highs generally are near or above 100 degrees daily. While average annual precipitation is near eight inches, actual rainfall amounts are unpredictable. Storm events can bring several inches of rainfall within a few hours. During these times, the otherwise dry gulches can turn into raging torrents which can block or wash out roads and trails. With the exception of a short section below Mud Spring, none of the drainages within the Leslie Gulch ACEC contain perennially flowing water. Surface water typically flows in the drainages for only a short time in the spring or following storm events.

The rugged, scenic topography of the ACEC area has formed primarily by the differential weathering of the Leslie Gulch Ash Flow Tuff. These rocks were deposited 15 million years ago by a rhyolite pyroclastic flow. This violent volcanic explosion, which can be compared to the 1980 Mount Saint Helens eruption, resulted in the filling of the geographic low created by the formation of the Mahogany Mountain caldera. This mobile, molten froth contained hot volcanic gases, volcanic ash and larger volcanic debris. As the deposit cooled and lithified into rock, gases were trapped, forming the pitted, "honeycomb" appearance of many of the rocks. Subsequent uplift, faulting and erosion has created the striking canyon vistas present today.

The variable soil types within the ACEC are primarily determined by **landform** and geologic type. The weathering of volcanic rocks in Leslie Gulch develop soils which are rich in clays and highly erosive. Many drainages have well formed gullies, and rills are common on some hillsides. This erosiveness is due to the steepness of the landforms, the unconsolidated nature of the weathered volcanic ash, the precipitation pattern, and the poor vegetative cover which occurs in the desert setting. Young, shallow soils have developed on outcrops of soft ash deposits, which provide unique conditions needed for many of the special status plants.

The canyons of the Leslie Gulch ACEC support the highest concentration of rare plant species in eastern Oregon, five of which are candidates for listing under the Endangered Species Act. The general ecological setting encompasses a wide variety of plant communities. An unusual pattern of northern, **mesic** flora represented by a relict stand of Ponderosa pine, mountain mahogany, and rocky mountain maple are in close association to a southern, **xeric** flora composed of greasewood, shadscale, and spiny **hopsage**. When combined with the rare plant species, the vegetative elements of the ACEC give a floristic variety unexcelled in Malheur County.

Mule deer, Rocky Mountain elk and California bighorn sheep are found in the upland habitats of the ACEC and in adjacent lands. Upland game birds such as chukar partridge and California quail occupy much of the area. The rugged canyons also provide habitat for coyote, bobcat, and a variety of non-game migratory birds. Raptors, northern flickers and white-throated swifts use the numerous cliff crevices and cavities, which also provide potential habitat for bats. The area also provides excellent reptile habitat.

Leslie Gulch is popular for recreational use. Developed recreational opportunities include boating, fishing, camping and sightseeing. The boat launch facility is a favored takeout point for floaters on the Owyhee Wild and Scenic River and provides the only launch facility on the upper Owyhee Reservoir. Dispersed recreational opportunities include hiking, rockclimbing, hunting, outdoor photography and wildlife watching. Leslie Gulch and the surrounding area provides one of the few places in Oregon where bighorn sheep can be hunted. The rockclimbing routes within the ACEC are highly challenging.

Most of the ACEC is made up of portions of three Wilderness Study Areas (**WSAs**). The Slocum Creek, Honeycombs and Upper Leslie Gulch **WSAs** have all been recommended by the BLM for wilderness designation. The Oregon Wilderness Environmental

Impact Statement identified all three **WSAs** as having a high degree of naturalness and outstanding opportunities for solitude or primitive and unconfined types of recreation.

The Leslie Gulch pasture of the Three Fingers temporary allotment makes up approximately 90 percent of the ACEC. The remainder of the ACEC is within the Bannock pasture of the same allotment.

The lands contained within the ACEC are public lands administered by the Bureau of Land Management. One **40-acre**, privately owned parcel is located in **T26S R45E Sec. 18 SW1/4 SE1/4**, at the confluence of Leslie and Dago gulches. This property is not part of the ACEC. There is a cabin and perennially flowing Mud Spring is on the parcel. A 100 foot wide public easement crosses this private land, providing public access to the shore of Owyhee Reservoir,

The lands surrounding Owyhee Reservoir are withdrawn for the use of the Bureau of Reclamation (BOR). Approximately 340 acres of these lands are currently managed by the BLM under a Memorandum of Understanding (MOU). These lands which are located at the mouth of Leslie Gulch are neither part of the ACEC nor part of the wilderness study areas, but are managed for compatibility with the ACEC.

Relevant And Important Values

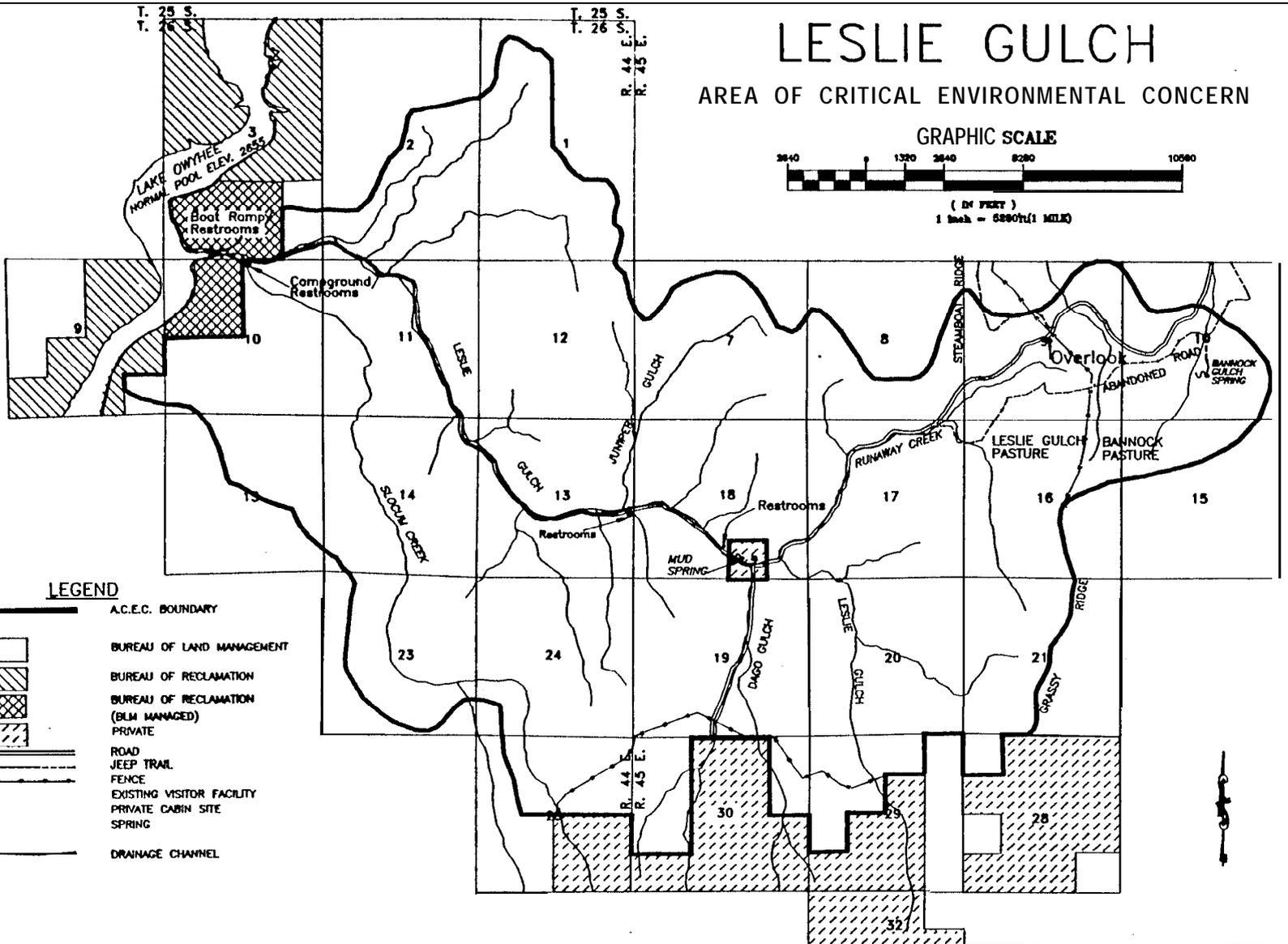
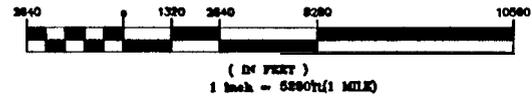
Special Status Plants

Five plant species found within the canyon are candidates for listing under the federal Endangered Species Act. All are associated with the unusual volcanic ash formations found in the area. Two of these species, Ertter's groundsel (*Senecio **ertterae*** - Category 1) and Packard's blazing star (***Mentzelia packardiae*** - Category 2), grow predominantly on the greenish-yellow volcanic ash-tuff talus slopes. Grimy ivesia (***Ivesia rhypara*** var. ***rhypara*** -Category 2) and Owyhee clover (***Trifolium owyheense*** - Category 2) grow on a shallow volcanic ash substrate. Sterile milk-vetch (***Astragalus sterilis*** -Category 2) also is found scattered on volcanic ash deposits throughout the region. Three uncommon plant species, Packard's sagebrush (***Artemisia packardiae***), Mackenzie's phacelia (***Phacelia lutea*** var. ***mackenziorum***) and bare-stemmed buckwheat (***Eriogonum novonudum***) are also found in the canyons and bluffs of the ACEC. Ertter's groundsel and Packard's blazing star have been listed by the

LESLIE GULCH

AREA OF CRITICAL ENVIRONMENTAL CONCERN

GRAPHIC SCALE



LEGEND

-  A.C.E.C. BOUNDARY
-  BUREAU OF LAND MANAGEMENT
-  BUREAU OF RECLAMATION
-  BUREAU OF RECLAMATION (BLM MANAGED)
-  PRIVATE
-  ROAD
-  JEEP TRAIL
-  FENCE
-  EXISTING VISITOR FACILITY
-  PRIVATE CABIN SITE
-  SPRING
-  DRAINAGE CHANNEL

state of Oregon as threatened, and grimy ivesia and sterile milk-vetch were proposed for addition to the state list in 1993.

Based on numbers and total acreage, grimy ivesia is the rarest species in the ACEC. Its geographical distribution includes two small sites in northern Nevada and another small site in Lake County, Oregon. In addition to the Leslie Gulch sites, a site in northern Nevada has also been identified for Packard's blazing star. Enter's groundsel grows in the Leslie Gulch vicinity and at two restricted sites near Birch Creek, a tributary of the Owyhee River approximately six miles southwest from Leslie Gulch. Cwyhee clover and sterile milk-vetch are endemic to the larger Owyhee region, with the clover known only on sites east of the Owyhee River.

Scenic Values

The scenery within the ACEC is dominated by spectacular geologic formations created by the differential weathering of the Leslie Gulch Ash-Flow Tuff member of the Succor Creek formation. The tuff may be 2,000 feet thick in some places. Its great thickness, uniformity and relative resistance to weathering formed the impressive cliffs, outcrops and spires that characterize the area. As the volcanic rocks cooled, gases trapped inside led to the creation of the eerie and spectacular "honeycombing" effect in some areas, and is responsible for many skyline windows in the rock formations. The various ash layers present a variety of colors ranging from yellow to green and multiple shades of red. The areas's vegetation and intrusions of more resistant rhyolite dikes, frequently columnar in appearance, provide additional contrasting texture and color to the inspiring landscape.

Under the BLM Visual Resource Management (VRM) program, the ACEC is within a designated Class II area (See Glossary in EA).

Bighorn Sheep Habitat

California bighorn sheep (*Ovis canadensis californiana*) are a Category 2 candidate for listing under the Endangered Species Act. In the early 1900s, bighorn sheep in Leslie Gulch were extirpated due to domestic sheep diseases and unregulated hunting. Seventeen bighorns were reintroduced in Leslie Gulch in 1965 and a second release of 15 head was made north of the ACEC in 1987. The herd has grown to a population of approximately 200-240

animals which range outside of the ACEC, utilizing a 120-square mile area on the east side of Owyhee Reservoir and the Owyhee River.

Leslie Gulch provides excellent habitat for bighorn sheep. The steep cliffs of the canyon offer escape cover for the animals, and the small natural shelters along the rock faces provide thermal cover. Grasses, forbs and shrubs provide ample forage. Mud Spring and Cwyhee Reservoir provide perennial water. The remote, rugged wilderness study areas extending beyond the ACEC provide a large area with a low potential for human harassment of the bighorns.

Major Management Issues

Activities Affecting Special Status Plants

Grazing

Livestock grazing may impact the Relevant and Important Value of special status plants through trampling, by introducing noxious weed seeds, and to a lesser extent by consuming the plants. Many of the known plant sites are situated on the lower slopes where cattle usually graze. Some plant sites have well developed trails through them which preclude plant growth due to continuing disturbance and soil compaction.

The 264 AUMs of grazing provided by the Leslie Gulch pasture provides income for the grazing permittees and helps support the customary life style of the local ranching community.

The special status plant populations have survived historic grazing pressures which were heavier than today. It is unknown if historic grazing has caused a reduction in the range of these species. Localized extinctions or population reductions may have occurred on suitable habitat which has been subject to grazing.

Recreation

People may impact the special status plants by trampling them or their habitat. Several of the plant sites are near preferred hiking routes, the main Leslie Gulch Road and the existing Slocum Creek campground. Factors affecting impacts by visitors include the levels and types of recreation and the location of recreational activities relative to the locations of the plant habitat. Promoting visitation to

Leslie Gulch or improving recreational facilities to an excessive level could **attract** too many visitors to the area. Inadequately managed increased visitor use in the area may cause unacceptable impacts to the Relevant and important Values of the ACEC. =

Road Maintenance

At three locations, the Leslie Gulch Road passes through habitat supporting special status plants. The road is maintained on an annual basis, with additional maintenance necessary following sporadic flood events. Maintenance activities disturb special status plant habitat, affect seed dissemination, and uproots individual plants. Disturbance to the roadsides also provides habitat for noxious weed invasion.

Grazing Impacts to Recreation

Some recreationists object to seeing cattle or their sign, and many have expressed the opinion that cattle should not be in or around developed recreational facilities such as campgrounds.

Acquisition of Private Inholding

The **40-acre** Dago Gulch private parcel has the only reliable, accessible water source within the ACEC. There is a cabin on the property and the owner is not required to control noxious weeds. There is no legal public access across this land to Dago Gulch and

there is limited control over the type of development which the owner could pursue. Some public opinion favors removing the cabin from the natural setting of Leslie Gulch. BLM is yet to determine if public interest is served best by acquiring ownership of the property or by acquisition of access and scenic easements. The water at the site is extremely important to the California bighorn sheep and is presently available for public use.

Rock Climbing

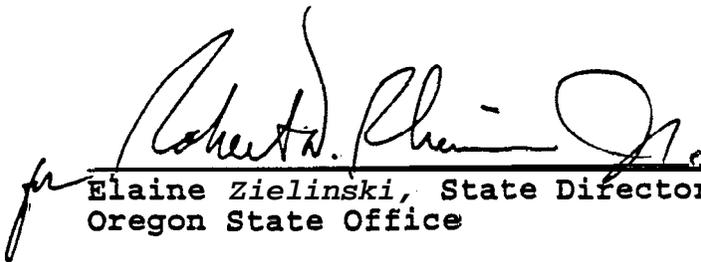
Several sport rock climbing routes within Leslie Gulch are of world class quality. All are located within the Wilderness Study Area portions of the ACEC. Climbers have created hand holds and use chalk which makes the hand holds quite visible. In addition, fixed metallic anchors to support ropes and other hardware are attached to the rock faces. Popular climbing routes can become highly visible and impact the relevant and important scenic values of the area as well as wilderness values.

Three noxious weed species have been found in Leslie Gulch, and other far more aggressive species have been located in nearby areas. Spread of these plants represents the greatest threat to the special status plants and their habitat. Weeds can be spread through movement of domestic and wild animals, by vehicles moving through the area, by the wind, and by general recreational activities including hiking and camping.

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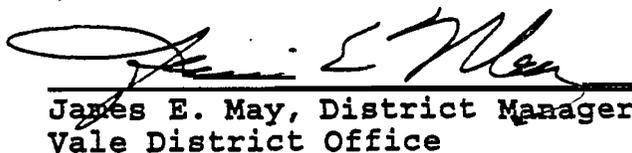
Vale District Office
100 Oregon Street
Vale, Oregon 97918

**Proposed Amendment
Northern Malheur Management
Framework Plan**



Elaine Zielinski, State Director
Oregon State Office

3/28/94
Date



James E. May, District Manager
Vale District Office

3/25/94
Date



Ralph Heft, Manager
Malheur Resource Area

3/25/94
Date

Chapter II - Proposed Amendments Northern Malheur Management Framework Plan Leslie Gulch -Area Of Critical Environmental Concern

Readers Guide

This section contains the proposed ACEC management actions which require MFP amendments. These amendments are necessary because the proposed actions are land use allocations which were not foreseen when the Northern Malheur MFP was completed in 1983. Protest procedures for this section are located at the end of the section.

Land Tenure

Factors Which Influence Management Prescriptions

Potential acquisition of private lands by the BLM must be consistent with the prescribed mission of the agency. The Northern Malheur MFP specifies that BLM will consider acquisition of private lands within Wilderness Study Areas, **ACECs**, **RNAs**, or other high value wildlife habitat through land exchange. Protection of the Relevant and Important Value of high quality scenery dictates analyzing characteristics of adjacent lands which might conflict with these values. The existence of structures immediately adjacent to the three wilderness study areas within the otherwise mostly natural setting of the ACEC conflicts with wilderness and scenic values. BLM policy states that the agency shall manage for the conservation of candidate species and **shall** ensure that management actions do not contribute to the need to list any of these species as threatened or endangered.

OBJECTIVE: Protect and enhance the Relevant and Important Values of special status plants, high quality scenery and bighorn sheep habitat that are found on

and influenced by private land surrounded by *the* ACEC.

MFP AMENDMENT: Acquire the 40 acre parcel located in T26S R45E Sec 18 SW114 SE1/4 through exchange, direct purchase, donation, easement, life estate or any other means. Public acquisition would only be completed with the cooperation of a willing seller. The Bureau recognizes its commitment to counties in Oregon for no net gain in federal land to maintain a stable economy and county tax base. Therefore, land exchange is the preferred method of acquisition. If an exchange is not acceptable to the land owner and the land is purchased, the Bureau will, over time, balance land acquisitions with sales.

RATIONALE: The parcel has two sensitive plant species, Packards blazing star and Erters groundsel, provides the only reliable bighorn sheep water within the ACEC and has outstanding scenic values. It provides public vehicular access to Dago Gulch and is used by the public for parking and camping. This use could be terminated at any time by the land owner. **Although** no known development is planned, the landowner could construct additional structures on the property increasing the level of impact to the surrounding setting. Allowing acquisition through any of several means will increase the chances for a successful acquisition of this important parcel.

Livestock Grazing

Factors Which Influence Management Prescriptions

The Southern Malheur Grazing Environmental Impact Statement (EIS) and Rangeland Program Summary (RPS) were completed in 1984. In these plans livestock use was allocated and objectives were set specifically by pasture for the pastures within EIS area, including the Leslie Gulch ACEC. The area of ACEC was identified as the Leslie Gulch and Bannock pastures, which are within the Mahogany Allotment (0500). The allotment at that time contained 327,129 federal acres, and grazing preference was allotted at 34,848 **AUMs**.

in 1984 the Mahogany Allotment was divided into five permanent and six temporary allotments. A 1988 decision to make the temporary allotments permanent is currently under appeal. The Bannock and Leslie Gulch pastures are within the Three Fingers temporary allotment which has 9,981 active and 4,653 suspended **AUMs** with four grazing permittees. Currently the two pastures within the ACEC are used by two of the permittees, Bud Greeley and **Delbert Allison**.

Livestock actual use records for the area exist since 1973. At that time the Leslie Gulch pasture was part of the Riverside pasture which is adjacent to and immediately north of the current Leslie Gulch pasture. The two pastures are divided only by natural barriers and a small amount of livestock movement takes place between the two pastures. Use between 1973 and 1979 in the two pastures was with up to 1400 cattle and 3500 AUMs between April and December. In 1979, Leslie Gulch was recognized as a separate pasture and livestock use was greatly reduced. Present use of the Leslie Gulch pasture is 132 cattle with 264 AUMs from March 1 to April 30.

The Bannock pasture is used by approximately 450 cattle from May 1 to October 31 in a deferred rotation grazing system with three other pastures, with use being deferred until after the critical growth period of key forage species (approximately July 1) two out of three years.

An allotment evaluation completed in 1990 estimated the livestock carrying capacity in Leslie Gulch pasture at 948 AUMs and Bannock pasture at 928 AUMs. Upland vegetation trend was up in the Bannock pasture and not apparent in the Leslie Gulch pasture. Utilization studies of key forage species have been conducted in the Leslie Gulch pasture since 1985, with the highest recorded utilization of key forage species being 16 percent. Utilization studies in the Bannock pasture from 1978 to 1989 indicated the average utilization of key forage species was 39 percent.

BLM policy states that the agency shall manage for the conservation of candidate species and shall ensure that management actions do not contribute to the need to list any of these species as threatened or endangered under the Endangered Species Act. Under a Conservation Agreement with the United States Fish and Wildlife Service, the Bureau of Land Management has agreed to develop a management plan for the ACEC containing measures to protect and conserve the special status plants found there.

OBJECTIVES: Protect the Relevant and Important Values of special status plant species and high quality scenery from possible damage due to livestock grazing. Eliminate conflicts between livestock and those recreationists who do not want to see livestock or their sign in the scenic, primitive setting of Leslie Gulch. Maintain the active grazing preference for the grazing permittees within the Three Fingers temporary allotment.

MFP AMENDMENT: Close the Leslie Gulch pasture to livestock grazing. Continue livestock grazing in the

Bannock pasture. The 264 animal unit months of grazing capacity would be moved to the other pastures of the Three Fingers temporary allotment.

RATIONALE: Livestock grazing is a discretionary activity authorized by the BLM. Livestock removal from the Leslie Gulch pasture would eliminate all threats to special status plants associated with livestock grazing. These threats include destruction of habitat through trailing, destruction of plants by trampling and ingestion, and transport of noxious weed seeds. Although improving, the lower seral vegetative conditions of the bottom areas near the Owyhee Reservoir may improve more quickly with removal of livestock grazing, reducing the chance of weed invasion.

Removal of livestock from the Leslie Gulch pasture would also protect the high quality scenery. There would be no new livestock trails, no grazed appearance, no livestock and no livestock sign to alter the scenic, natural setting within the ACEC.

The 264 AUMs of active preference will be accommodated elsewhere in the Three Fingers temporary allotment. There will be no reduction in active preference and no economic impact to the grazing permittees who currently use the Leslie Gulch pasture.

The management actions proposed to protect the Relevant and Important Values of the ACEC will affect nearly every use of Leslie Gulch. In addition to livestock grazing, many recreational activities, access, wild horse use, and land ownership are being either changed or eliminated to protect these values. These changes are based on The Federal Land Policy and Management Act of 1976, Section 202 and implementing regulations at 43 CFR 1610.4-7. The cumulative management actions proposed will protect the Relevant and Important Values of the ACEC and ensure that management does not contribute to the need to list any of the special status species. In addition, the proposal to remove livestock grazing from the Leslie Gulch pasture is supported by BLM policy as follows:

1621.31A1c—"Maintaining existing ecological stage in order to protect a special status species"

1622.31A1—"Identify public lands where livestock grazing will be excluded considering terrain characteristics, potential of the soil and vegetation, the presence of undesirable vegetation or the presence of other resources that may require special management or protection,..."

1623.31 A1 —"Identify natural areas...must be designated as Areas of Critical Environmental Concern..."

1623.31 A2b—"Establish constraints on the development and use of the area."

Wild Horses

Factors Which Influence Management Prescriptions

The Wild Horse and Burro Act of 1971 provided for the management and protection of wild horses. The Three Fingers Herd Management Area was established as a result of that act with current boundaries and numbers established in the Northern Malheur Management Framework Plan of 1983. There are between 75 and 150 wild horses within the 76,933 acre HMA, approximately 10% of which is within the Leslie Gulch ACEC.

Wild horses are inventoried annually, provided funding is available. Currently there is little or no wild horse use within the ACEC. Historically significant use by wild horses took place within the ACEC, and a horse trap site was located in Juniper Gulch with over 200 horses being gathered from the area in the late 1960s. BLM policy states that the agency shall manage for the conservation of candidate species and shall ensure that management actions do not contribute to the need to list any of these species as threatened or endangered.

OBJECTIVES: Protect the Relevant and Important Value of special status plants within the ACEC from potential impacts from wild horses.

MFP AMENDMENT: The Leslie Gulch ACEC will be removed from the Three Fingers Herd Management Area. Any horses which move into the ACEC would be relocated to the HMA or gathered and removed for adoption.

RATIONALE: Although wild horse use of the ACEC is currently minimal, the animals have used the area in the past and could move into the area once again. special status plant sites could be impacted if horses were to concentrate on the sites for any length of time. The 7,000 acres of the ACEC that are within the Herd Management Area represent approximately 10% of the HMA. This amendment proposes not to change the numbers of horses that will be maintained within the HMA.

The management actions proposed to protect the Relevant and Important Values of the ACEC will affect nearly every use of Leslie Gulch. In addition to wild horse use, many recreational activities, access, livestock grazing, and land ownership are being either changed or eliminated to protect these values. The cumulative management actions proposed will protect the Relevant and Important Values of the ACEC and ensure that management does not contribute to the need to list any of the special status species.

Recreational Domestic Livestock Use

FACTORS WHICH INFLUENCE MANAGEMENT PRESCRIPTIONS: Under current management guidance, the entire ACEC is open for recreational domestic livestock use, including horses, mules, llamas, etc. Currently, the level of use is relatively low with most use occurring during the big game hunting season. Future increased domestic recreational livestock use is expected throughout the area, both inside and outside the ACEC. BLM policy states that the agency shall manage for the conservation of candidate species and shall ensure that management actions do not contribute to the need to list any of these species as threatened or endangered.

OBJECTIVES: Protect the Relevant and Important Value of special status plants by reducing the potential for spread of noxious weeds into the area by domestic recreational livestock. Reduce conflicts between recreationists within the ACEC.

MFP AMENDMENT: Administrative horse use only will be allowed within the Leslie Gulch ACEC. Administrative uses include conducting official business, such as for removal of trespass livestock and search and rescue activities.

RATIONALE: Horses and other domestic livestock can transport weed seeds in their hooves and digestive tracts. Hay brought into the ACEC for feed and for bedding can also contain weed seeds. There has been nominal historic recreational horse use in the ACEC with most use being associated with big game hunting. Most of the ACEC is within 2.5 miles of the Leslie Gulch Road and public lands outside of the ACEC remain available for recreational domestic livestock use.

The management actions proposed to protect the Relevant and Important Values of the ACEC will affect nearly every use of Leslie Gulch. In addition to recreational domestic livestock use, many other

recreational activities, access, wild horse use, livestock grazing and land ownership are being either changed or eliminated to protect these values. The cumulative management actions proposed will protect the Relevant and Important Values of the ACEC and ensure that management does not contribute to the need to list any of the special status species.

Dago Gulch Road

FACTORS WHICH INFLUENCE MANAGEMENT

PRESCRIPTIONS: A private right-of-way across public land has been granted for the road in Dago Gulch. This right-of-way is a nonexclusive, nonpossessory right-of-way which provides legal vehicle access for the owner of the private lands at the head of Dago Gulch, while allowing public access to the road for the 0.8 mile of public lands it crosses. Although this road connects physically with the Leslie Gulch Road, there is no legal public access across the private land at the mouth of Dago Gulch. Several special status plant sites are located immediately adjacent to the Dago Gulch Road. The road also serves as the boundary between the Slocum Creek and Upper Leslie Gulch **WSAs** which are closed to vehicle use. BLM policy states that the agency shall manage for the conservation of candidate species and shall ensure that management actions do not contribute to the need to list any of these species as threatened or endangered.

OBJECTIVES: Reduce the level of impact to the Relevant and Important Values of special status plants and high quality scenery along the Dago Gulch Road. Reduce vehicular trespass from the Dago Gulch Road into the Upper Leslie Gulch Wilderness Study Area.

MFP AMENDMENT: A locked gate and fence will be installed in Dago Gulch near the southern boundary of the 40 acre private parcel. The road will remain open for access to private land owners and for administrative purposes.

RATIONALE: Vehicle traffic is impacting special status plant sites along the road. Vehicles are also leaving the road and driving into adjacent **WSAs**.

The management actions proposed to protect the Relevant and Important Values of the ACEC will affect nearly every use of Leslie Gulch. In addition to vehicle access to Dago Gulch, livestock grazing, many recreational activities, wild horse use, and land ownership are being either changed or eliminated to protect these values. The cumulative management

actions proposed will protect the Relevant and Important Values of the ACEC and ensure that management does not contribute to the need to list any of the special status species. An existing right of way to the private lands in upper Dago Gulch entitles the owner to use and maintain the road.

Accec Acreage

FACTORS WHICH INFLUENCE MANAGEMENT

PRESCRIPTIONS: The Northern Malheur MFP estimated the Leslie Gulch ACEC to cover 9,300 acres.

OBJECTIVE: Correct an acreage error in the Northern Malheur Management Framework Plan.

MFP AMENDMENT: Designate the Leslie Gulch ACEC as 11,653 acres.

RATIONALE: Recent measurements using new technology has resulted in an updated ACEC acreage of 11,653 acres.

Camping Restriction

FACTORS WHICH INFLUENCE MANAGEMENT

PRESCRIPTIONS: Currently, there are few restrictions upon camping within the ACEC. Dispersed vehicle camp sites are often established near the Dago Gulch and Leslie Gulch Roads. The presence of vehicle campers along the two roads impacts the Relevant and Important Values of the ACEC and is vehicle trespass into the **WSAs** which is not in accordance with the IMP.

Although occurring at a much lower level than day hiking, back country camping has seen an increase in recent years. All forms of recreational activities are expected to increase within the ACEC in the future.

OBJECTIVES: Protect the Relevant and Important Values of the ACEC. Enhance the wilderness values of solitude and the enjoyment of a primitive recreational experience for back country visitors to the ACEC.

MFP AMENDMENT: The Leslie Gulch ACEC is designated as day use only outside of the Slocum Creek Campground.

RATIONALE: The back country portions of the ACEC remain readily available via day hiking due to the central location of the Leslie Gulch Road and size of the ACEC. Camping remains available within the ACEC at the Slocum Creek Campground and outside

the ACEC on surrounding public lands. Dispersed camping has resulted in the proliferation of camp fire sites, trash, damage to vegetation due to gathering wood for fires and damage to special status plant sites. Impacts to the Relevant and Important Values of high quality scenery, special status plants and California bighorn sheep will be reduced.

The management actions proposed to protect the Relevant and Important Values of the ACEC will affect nearly every use of Leslie Gulch. In addition to camping, many other recreational activities, access, livestock grazing, wild horse use, and land ownership are being either changed or eliminated to protect these values. The cumulative management actions proposed will protect the Relevant and Important Values of the ACEC and ensure that management does not contribute to the need to list any of the special status species.

Rock Climbing

FACTORS WHICH INFLUENCE MANAGEMENT

PRESCRIPTIONS: Two primary sport rock climbing sites, known as "Einstein" and "Asylum", were developed within the ACEC in 1990 and 1991. Several of the climbing routes at the "Einstein" climbing site are of world class quality. The "Einstein" site is the most developed rock wall with 26 climbing routes, each utilizing one or a combination of 14 different series of fixed anchors and hand/foot holds. The climbing site is on a vertical to overhanging rock face accessed by a quarter mile hike into upper Leslie Gulch canyon. The site is readily viewed by back country users in Upper Leslie Gulch Wilderness Study Area (WSA, OR-3-74). "Asylum", with seven climbing routes, is located in the same WSA on an exposed rock wall at the mouth of upper Leslie Gulch canyon. This site is in view of motorists on the Leslie Gulch Road. A few other scattered climbing routes were also established within the ACEC in the Honeycombs and Slocum Creek WSAs.

Sport rock climbing is a recreational and competitive sport of free climbing on established climbing routes without the direct assistance of artificial climbing devices (ropes, ascenders, jumars, etc). Each climbing route has a series of fixed anchors placed up the rock face. A rope temporarily attached to the fixed anchors provides for climber safety while free climbing. Natural and artificially constructed hand/foot holds and gymnastic type chalk are also used. Accumulations of chalk create a visible contrast on the rock surfaces. Each fixed anchor is a small alloy hanger device or a carabiner held permanently in place by an expanding bolt placed in a predrilled

hole. Fixed anchors are a mix of both coated and uncoated alloy surfaces, with the intent of coated devices to blend with the colors of the rock. The bolts used in Leslie Gulch are reportedly capable of lasting for several years.

All climbing routes were developed without prior authorization from the BLM. Working with the responsible sport rock climbers in 1991, the BLM set a moratorium on the placement of any additional fixed anchors within the ACEC until further planning could determine the future of sport rock climbing within the ACEC and WSAs. The moratorium precluded completion of some of the seven routes at "Asylum." The rock climbers have cooperated with the moratorium, while continuing to use the completed climbing routes.

Chapter 3 of BLM Manual H-8550-1, Interim Management Policy and Guidelines for Lands Under Wilderness Review (IMP), states "no new, permanent...structures or installations will be permitted in WSAs, except those that are the minimum necessary for public health and safety in the use and enjoyment of the public lands' wilderness values." Nearly all locations within the ACEC are reasonably accessible without the use of place fixed anchors.

Sport rock climbing is increasingly conducted on artificially constructed rock walls conveniently located in metropolitan areas, including Boise, Idaho. Climbers enjoy the use of artificial walls to safely test their climbing skills over a challenging climb route without a natural setting or the need for values associated with wilderness for them to participate in the sport.

OBJECTIVES: Maintain the ACEC's Relevant and Important Value of high quality scenic values. Meet requirements of the Interim Management Policy for Wilderness Study Areas.

ACTION: Within one year, rock climbers who use the area will remove or mitigate all fixed anchors, artificial hand holds and visual evidence of contrasting chalk use developed in the ACEC since 1990. This does not include those fixed anchors at the "Einstein" climbing site. The fixed anchors and artificial hand holds, and any remaining evidence of visually contrasting hand drying agents at the "Einstein" climbing site will be removed, or mitigated by the rock climbers within five years, with a minimum of 20 percent of the original number of fixed anchors removed/mitigated every year. The removal and mitigation methods must be approved by BLM. Fixed anchors will be inspected by rock climbers who use

Vegetation And Rock Gathering Permits

FACTORS WHICH INFLUENCE MANAGEMENT

PRESCRIPTIONS: The Northern Malheur MFP states that a protective withdrawal from locatable minerals is to be secured for the Leslie Gulch ACEC. The MFP also closes the ACEC to salable minerals, and restricts leasable minerals to no surface occupancy.

The ACEC is currently open for the collection of Special Forest Products which includes such items as grasses, roots, transplants, firewood and edible plants. Any permit applications for collections of these materials would require preparation of a **catagorical** exclusion record to analyze impacts to other values found in the ACEC.

OBJECTIVES: Protect the Relevant and Important Values and wilderness character of the ACEC from damage caused by plant and mineral collection.

MFP AMENDMENT: Close the ACEC to vegetation and mineral collection without a permit. Permits may be granted by the authorized officer for scientific and educational purposes provided that the Relevant and Important Values and wilderness character are protected.

RATIONALE: Plant material collection is a particular threat to special status plants. Other plant species are an integral part of the scenery within the ACEC. Collection of plants for fire wood or other uses **could** adversely affect the Relevant and Important Values of the ACEC.

The intricate rock formations are also important components of the scenery in the ACEC. These formations **could** be desirable rock garden material. Collection of these materials **could** also adversely affect the Relevant and Important Values of the ACEC.

Extraction of these types of materials is **contrary** to the definition of wilderness, as described in the Wilderness Act, which states that a wilderness is an area of earth untrammelled by man, protected and managed so as to preserve its natural conditions. The collection of natural materials within **WSAs** for the purpose to advancing scientific or educational understanding of resource values of a WSA is permissible so long as wilderness values are not so impaired as to make the area unsuitable for wilderness designation.

the climbing routes and any unsafe fixed anchor of a climbing route and associated fixed anchors, artificial hand holds and visible evidence of hand drying agents in common with the climbing routes associated with the unsafe anchors will be immediately removed by rock climbers who use the climbing site. Until removed or mitigated as unusable or **unaccessible**, camouflaging techniques must be applied and maintained by rock climbers on existing fixed anchors at the "Einstein" site. No maintenance of fixed anchors except camouflaging of existing fixed anchors, and the addition of new or of replacement fixed anchors and artificial hand holds will not occur in the ACEC, except those needed for emergency search or rescue.

RATIONALE: The most popular recreational pursuit within the ACEC is leisure driving to enjoy the exceptional scenic qualities of the natural landscape. Sport rock climbing at the "Asylum" climbing site is a visually disruptive presence within view of the Leslie Gulch Road. Opportunities for motorists' enjoyment of the area's natural qualities would be enhanced by removal of this climbing site.

Although enjoyment of sport rock climbing with fixed anchors may be enhanced when performed outdoors in a natural setting, pursuit of the activity or it's enjoyment does not require wilderness characteristics. While the placement of fixed anchors is preferred for safety, the establishment of climbing routes with fixed anchors within **WSAs**, **considered** permanent installations under the IMP, are not a minimum requirement to enjoy wilderness values and are not in compliance with the IMP. BLM approval of specific equipment removal or mitigation plans would **allow** for analysis of these procedures to help ensure the least impacting methodologies are selected.

Continued placement of fixed anchors would cause accumulative impacts to the wilderness value of naturalness, and likely impact some outstanding opportunities for solitude with other WSA visitors in the ACEC. Over the long term, requirements of the IMP **would** be met. The visual scaring and disruptive contrast of fixed anchors would become less apparent at the "Einstein" site as fixed anchors are removed or mitigated. Opportunities for rock climbing without the placement of fixed anchors and artificial hand holds would remain available throughout the ACEC.

Monitoring

A specific monitoring plan for the Leslie Gulch ACEC will be incorporated into the final ACEC Management Plan. Monitoring objectives, the type of monitoring and methods used will be based on the actions and objectives found in the final ACEC Management Plan.

Monitoring provides information about the interrelationships of various physical, biological, and social variables and their impacts on resources. This information is evaluated and used to determine if plan objectives are being met. All types of monitoring activities outlined will include the following steps:

- 1) monitoring objectives established
- 2) baseline information collected
- 3) monitoring actions repeated over time using consistent standardized procedures
- 4) monitoring results interpreted relative to the baseline information and the monitoring and implementation objectives

Protest Procedures

The Resource Management Planning process includes an opportunity for administrative review via a plan protest to the BLM Director if you believe the approval of any provisions of this proposed Management Framework Plan amendment would be in error. (See 43 CFR1610.52.) Careful adherence to these guidelines will assist in preparing a protest that will assure the greatest consideration to your point of view.

Only those persons or organizations who participate in our planning process leading to this MFP amendment may protest. If our records do not indicate that you had any involvement in any stage in the preparation of this proposed MFP amendment, your protest will be dismissed without further review.

A protesting party may raise only those issues which he or she submitted for the **record** during the planning process. New issues raised in the protest period should be directed to the Vale District or Malheur Resource Area Manager for consideration in plan implementation, as potential plan amendments or as otherwise appropriate.

The period for filing a plan protest begins when the Notice of Availability of the proposed MFP amendment is published in the Federal Register. The protest period extends for 30 days and is expected to close on or about May 13, 1994. There is no provision for any extension of time. To be considered "timely," your protest must be postmarked no later than the last day of the protest period. Also, although not a requirement, we suggest that you send your protest by certified mail, return receipt requested.

Protests must be filed in writing to:

Director (760)
Chief, Planning and Environmental Coordination
Bureau of Land Management
1849 C Street, NW
406 L. Street
Washington, D.C. 20240

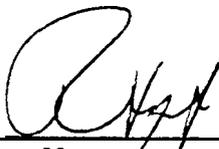
In order to be considered complete, your protest must contain, at a minimum, the following information:

1. The name, mailing address, telephone number, and interest of the person filing the protest.
2. A statement of the issue or issues being protested.
3. A statement of the part or parts of the MFP amendment being protested. To the extent possible, this should be done by reference to specific pages, paragraphs, sections, tables, maps, etc. included in the document.
4. A **copy** of all documents addressing the issue or issues that you submitted during the planning process or a reference to the date the issue or issues were discussed by you for the record.
5. A concise statement explaining why the BLM State Director's decision is believed to be incorrect. **This** is a **critical** part **of your** protest. Take care to document **all** relevant facts. As much as possible, reference or cite the planning documents, environmental analysis documents, available planning records (i.e. meeting minutes or summaries, correspondence, etc.) A protest which merely expresses disagreement with the Oregon State Director's proposed decision, without any data will not provide us with the benefit of your information and insight. In this case, the directors's review will be based on the existing analysis and supporting data.

U. S. Department of the Interior
Bureau of Land Management

Vale District Office
100 Oregon Street
Vale, Oregon 97918

**Proposed Leslie Gulch ACEC
Management Plan**



Ralph Heft, Manager
Malheur Resource Area

3/25/94
Date

Chapter III - Proposed Management Plan Leslie Gulch Area Of Critical -Environmental Concern

Readers Guide

This section contains the proposed ACEC management actions which do not require amendment of the Northern Malheur MFP. Protest procedures for this section are located at the end of the section.

Wilderness

Factors which influence Management Prescriptions

The 1989 BLM Oregon Final Wilderness EIS and subsequent 1991 BLM Oregon Wilderness Study Report to the President recommended nearly all of the three **WSAs** within the ACEC be designated as components of the National Wilderness Preservation System. In 1992, the President submitted to Congress the same recommendation. Congress has no deadline to make a decision on the wilderness issue. There is substantial public support for wilderness designation of the **WSAs**.

While in study status, the three wilderness study areas within the Leslie Gulch ACEC are managed in accordance with **BLM's** Interim Management Policy and Guidelines for Lands under Wilderness Review (IMP) (BLM Manual Handbook 8550-1) and Instruction Memorandum OR-94-023, "Interim Management of Wilderness Study Areas". In general, the only activities allowed under these guidelines are temporary uses that create no new surface disturbance. Proposed surface disturbing management actions which would require reclamation **could not** be implemented until Congress removes an area from WSA status. Surface disturbing actions proposed in this plan have been assessed and meet the IMP by providing for one or more of the following: 1) the action is the minimum necessary to protect or enhance wilderness values; 2) the action provides the minimum necessary facilities for public enjoyment of the wilderness values; or 3) the action is necessary for public health and safety in the use and enjoyment of the public lands' wilderness values. Implementation of any surface disturbing action within a WSA must be substantiated by appropriate monitoring. Monitoring

results must show that the impacts on wilderness values requires a project's implementation as a minimum action to protect or enhance the wilderness resources or their uses.

Activities that do not impair the land's suitability as wilderness or those that protect or enhance wilderness values are permitted in **WSAs**. The IMP requires separate analysis of impacts for the exceptions of use or surface-disturbing activities to ensure that wilderness values are not so impaired as to make a WSA not suitable for wilderness designation. The environmental analysis of the proposed action for this ACEC Management Plan has determined that the management actions affecting **WSAs** meet the minimum requirements for approval under IMP. A decision to implement an approved ACEC management action within a WSA must have a project plan and assure the following: 1) the project is determined necessary and timely to protect the **needs** of wilderness values and/or is relevant to visitors' health, safety, **and/or** their enjoyment of the wilderness values and uses, and 2) the projects's size, scope and design do not exceed the extent of action necessary to meet the projects's purpose and needs for responsible management of wilderness values and uses.

The IMP states that livestock grazing activities, mining, and mineral leasing uses on lands under wilderness review may continue in the manner and degree in which these uses were being done on October 21, 1976. These are "grandfathered" uses. Livestock grazing is grandfathered in all three **WSAs**. There are no grandfathered mining claims or mineral leases within the **WSAs** of the Leslie Gulch ACEC.

New permanent structures, installations or trails are permitted if needed to preserve wilderness and resource values or provide the minimum necessary for public health and safety in the use and enjoyment of the public lands wilderness values. Maintenance, construction or removal of existing **structures** and installations are permitted if accomplished by primitive means. New permanent range improvements may be approved for the purpose of enhancing wilderness values by better protecting the rangeland in a natural condition.

Land use authorizations such as leases and special use permits may be permitted if BLM determines that wilderness values would not be impaired. Changes in livestock use are allowed if the changes do not cause declining condition or trend of the vegetation or the soil. Noxious weeds may be controlled by grubbing

or chemicals if there is no effective alternative and there are no serious adverse impacts on wilderness values.

The IMP provides for land exchanges when BLM receives lands within an area under wilderness review in exchange for public lands not under wilderness review.

Any portions of the **WSAs** that are Congressionally designated as wilderness would be managed in accordance with **BLM's** Wilderness Management Policy; Title 48 CFR 8560 and BLM Manual 8560, Management of Designated Wilderness Areas and other applicable laws and regulations. A wilderness management plan would be developed for any designated wilderness area. All issues and needs to specifically manage the wilderness area(s) would be addressed in the plan. Appropriate decisions of this plan would be included in the wilderness management plan.

1. Objective

Maintain the suitability of the wilderness study areas for inclusion in the National Wilderness Preservation System.

a. Action

Comply with the requirement of the Interim Management Policy and Guidelines for Lands Under Wilderness Review.

Rationale

BLM is required **by** law to comply with this guidance.

Access/Roads

Factors which influence Management Prescriptions

The Leslie Gulch Road was inadvertently constructed through several sites which contain special status plants. When the present road was constructed in **1969**, the significance of these plant populations was unknown. Annual road maintenance and the disruption of surface water flows by the road may be impacting plants within these sites.

A private right-of-way across public land has been granted for the road in Dago Gulch. This right-of-way is a nonexclusive, nonpossessory right-of-way which provides legal access for the owner of the private lands at the head of Dago Gulch. Although this road connects physically with the Leslie Gulch Road, there

is no legal public access across the private land at the mouth of Dago Gulch. The few hundred feet of Dago Gulch road across this private parcel could legally be closed to the public by the private landowner.

The primitive road along the top of Steamboat Ridge once provided access to a horse trap that was used for gathering wild horses. The trap has not been used for many years and the road is not maintained. This route leaves the Leslie Gulch Road near the Overlook and crosses approximately 0.25 mile of the ACEC before following the ridge top for several miles. This is not a constructed road and has no **right-of-way** or easement. Primary current use is recreational access for hunters during big game season and vehicular access for OFDW personnel during annual big game counts. Trespass vehicle use is spreading from this route into the Honeycombs WSA. The steep grade of the road within the portion inside the ACEC is causing some accelerated soil erosion.

1. Objectives

Reduce driving hazards and road congestion, disperse recreational use, direct use away from special status plant sites and provide for increased back country access.

a. Action

Construct up to four pullout/parking areas for parallel parking along the Leslie Gulch Road. If mitigation standards in the remainder of the plan are insufficient for the protection of the wilderness values, then a vehicle pullout/parking site will be developed. Additionally, a pullout/parking site may be developed if over fifty percent of back country visitors surveyed during the two- month highest annual visitation period have had their opportunities for solitude or primitive recreation significantly impacted. If surveys are not available, then that determination will be made by an **interdisciplinary** BLM evaluation.

Rationale

Where parking is not currently provided, visitors occasionally park on the road surface creating a driving traffic congestion. When parking off of the road, drivers are damaging vegetation, causing soil compaction, and are threatening special status plant species and their habitats within **WSAs**. The distribution of recreational use in the ACEC is partially dependent on the availability of suitable vehicle parking. The establishment of up to four pullout/parking areas would meet the IMP by providing the minimum necessary facilities for

safe parking at determined locations so visitors may use and enjoy wilderness values in the back country of the ACEC. Continued adverse impacts to vegetation and soils would be minimized in **WSAs** along the Leslie Gulch Road. In the long term, in the more heavily used back country areas, the impacts to wilderness resources would be reduced, and opportunities for solitude and primitive recreation enhanced by decreasing the number of party contacts.

2. Objectives

Reduce conflicts between the Leslie Gulch Road and the special status plant sites located along the road.

a. Actions

1. Evaluate road width, maintenance practices and design where the Leslie Gulch Road crosses special status plant sites to identify opportunities to reduce conflicts with the plants. Road realignment in non-WSA locations could be made for enhancing special status plant habitat.

2. Road maintenance on the Leslie Gulch Road would continue to be done as needed. Generally, the road is graded annually with major work scheduled in response to flood events. Outside the special status plant sites, the road maintenance follows standard practices with a goal being to retain a graded and drained road prism. Procedures to achieve this include cleaning of the roadside ditches, backslopes, and crowning of the road surface. Roadside seeding with native plant species may be done to reduce weed invasion.

3. Drainage crossings along the Leslie Gulch Road would have drop structures constructed as necessary to retain existing road standards. Where **culverts** have been installed, culvert maintenance will follow standard practices including tail ditch maintenance and control of intersecting **drainages** to control runoff.

Rationale

Slight changes to road maintenance practices or road design **could** allow recovery of lost plant habitat adjacent to the road. The primary concern will be to avoid further losses while retaining the existing levels of access.

The nature and levels of recreational use in Leslie Gulch dictate that a high standard of access be maintained. However, improving the road standard would encourage more use of the ACEC and would adversely impact the Relevant

and Important Values of the ACEC. Storm events within the gulch often result in high levels of runoff that can seriously degrade the drainage crossings along the Leslie Gulch Road. Crossings and culverts must be designed and maintained to withstand high peak flows. Surface flow can also erode the surface of the road if not properly diverted. Standard maintenance practices and designs have evolved over long periods of time to provide for stable roads. All road work will consider the scenic values contained within the ACEC and must meet IMP guidance since the WSA boundaries are at the shoulders of the roads.

3. Objective

Control accelerated soil erosion on the Steamboat Ridge Road and reduce vehicular trespass into the Honeycombs WSA while retaining vehicular access to Steamboat Ridge.

a. Action

Erosion control improvements will be installed where accelerated erosion is occurring on the Steamboat Ridge Road. WSA boundary signs and increased patrolling will be used to discourage vehicular traffic into Honeycombs WSA. If monitoring indicates that unacceptable resource damage is continuing, Steamboat Ridge Road would be closed using emergency OHV closure procedures.

Rationale

Effective closure of the road would require extensive and **costly** measures to prevent off highway vehicles from driving around the closure. Driving around the closure would lead to increased resource damage. The level of use upon the Steamboat Ridge Road is very low. The road is not within the WSA and crosses only about 0.25 mile of the ACEC. The Oregon Department of Fish and Wildlife uses the road for annual big game inventory.

Land Tenure

Factors Which Influence Management Prescriptions

Potential acquisition of private lands by the BLM must be consistent with the prescribed mission of the agency. Protection of the naturalness of the wilderness study areas and the Relevant and Important Value of high quality scenery dictates analyzing characteristics of adjacent lands which

might conflict with these values. The existence of structures immediately adjacent to the three wilderness study areas within the otherwise mostly natural setting of the ACEC conflicts with wilderness and scenic values.

Mud Spring is the only accessible, perennial water within the ACEC. The California bighorn sheep, another Relevant and Important Value, use the spring and are often disturbed by visitors who also use the water.

1 Objective

Reduce the impacts of developments contained on the 40 acre Dago Gulch parcel upon the ACEC's Relevant and Important Values of high quality scenery and California bighorn sheep.

a. Action

With public acquisition of the 40 acre parcel at the junction of Dago and Leslie Gulches, the area will be reclaimed to a primitive state by removal of all structures and reseeding with native vegetation. No water would be developed at the site for public consumption.

Rationale

Returning the area to a primitive condition would eliminate the visual impacts of the site on the surrounding ACEC. Development of water at the site for public consumption would increase conflicts between humans and the bighorn sheep and other wildlife which water at the site. Developed water would also attract more recreational use within the ACEC.

Minerals

Factors Which Influence Management Prescriptions

The Northern Malheur Management Framework Plan states that a protective withdrawal from locatable mineral activity is to be secured for the Leslie Gulch ACEC. This withdrawal would remove the ACEC from mine claim location or development activity under the General Mining Law of 1872. This withdrawal would require Congressional review to implement since it is in excess of 5,000 acres. The MFP also states that the ACEC would be closed to salable mineral activity and that mineral leasing be allowed only with no surface occupancy.

Approximately 85% of the ACEC is contained within three WSAs. The 1989 BLM Oregon Final Wilderness

EIS and subsequent 1991 BLM Oregon Wilderness Study Report to the President recommended nearly all of the three WSAs within the ACEC be designated as components of the National Wilderness Preservation System. In 1992, the President submitted to Congress the same recommendation. Congress has no deadline to make a decision on the wilderness issue. WSA land within the ACEC not recommended for wilderness designation are at two locations: 1) the width of the lower Leslie Gulch canyon floor, not to exceed 400 feet from either side of the Leslie Gulch Road, from the private land at Mud Spring down canyon to the Bureau of Reclamation-administered land and 2) the width of the Slocum Creek canyon floor extending for 1,200 feet south from the Slocum Creek campground area.

While in study status, the three wilderness study areas within the Leslie Gulch ACEC are managed in accordance with BLM's Interim Management Policy and Guidelines for Lands under Wilderness Review (IMP) (BLM Manual Handbook 8550-I) and Instruction Memorandum OR-94-023, "Interim Management of Wilderness Study Areas". Although there are presently no mining claims within the ACEC, the area is open for the location of mining claims. Mineral exploration and development on mining claims within the WSAs is regulated to protect wilderness values. Since October of 1990, no surface disturbing work which would require reclamation has been allowed within WSAs in Oregon.

In the portions of the ACEC which are outside of the Wilderness Study Areas, claims can be located and mineral development could proceed as provided for in the General Mining Law of 1872 and the implementing regulations.

1. Objectives

Protect the Relevant and Important Values of the ACEC from adverse impacts due to mineral exploration and development.

a. Actions

1. A locatable mineral withdrawal would be pursued for the entire ACEC as called for in the Northern Malheur Management Framework Plan. Because the area to be withdrawn is larger than 5,000 acres, a mineral withdrawal would require Congressional notice and would be subject to veto by either house of Congress.

2. The entire ACEC would remain closed to salable mineral development as called for in the Northern Malheur Management Framework Plan.

3. Mineral leasing would be restricted to no surface occupancy as called for in the Northern Malheur Management Framework Plan.

Rationale

Any potential mineral development scenario would not be compatible with the Relevant and Important Values of the ACEC. Those portions of the ACEC within **WSAs** are protected from development as long as they remain in study status. In those areas outside the **WSAs**, locatable mineral activity is regulated by the 43 CFR 3809 regulations to prevent unnecessary and undue degradation of the federal lands. Under these regulations impacts to the Relevant and Important Values of the ACEC can not be prevented. If the ACEC were left open to location under the mining law, a plan of operations and submission of a bond would be required for any locatable mineral development proposed within the ACEC. However, claimants would retain the basic right to pursue development of claims under the Mining Law of 1872 even if they impact the Relevant and Important Values for which the ACEC was designated.

Any Congressionally designated wilderness would likely be withdrawn from mineral activity. Congress can adjust wilderness boundaries during the designation process, so portions of the ACEC may not be protected. Mining claims located within the **WSAs** while in study status would be subject to validity examination should any development work be proposed following designation as wilderness. With a valid discovery, mineral development could proceed within the designated wilderness area.

Following Congressional action which does not designate the areas as wilderness, the WSA portions of the ACEC would again become available for locatable mineral development without a mineral withdrawal.

Livestock Grazing

Factors Which Influence Management Prescriptions

With the closing of the Leslie Gulch Pasture to grazing, only the small portion (800 acres) of the ACEC that lies within the Bannock Pasture is open to livestock. The Bannock Pasture contains 12,238 acres and is grazed with approximately 450 cattle with two other pastures in a deferred rotation grazing system from **5/1 to 10/31**.

1. Objective

Maintain vegetative condition in that portion of the ACEC in the Bannock pasture which may be affected by livestock.

a. Action

Establish additional vegetative monitoring in the portion of the ACEC in the Bannock pasture.

Rationale

Monitoring of vegetation in the Bannock Pasture will be necessary to determine whether livestock grazing is having any negative impacts to ACEC values in that area.

2. Objective

Ensure compliance with closure of Leslie Gulch pasture to grazing.

a. Action

Monitor Leslie Gulch pasture for compliance with livestock closure to determine the extent of livestock drift from adjacent areas. Range riders will be utilized to control livestock movement in unfenced areas without natural barriers. If livestock trespass occurs in Leslie Gulch pasture more than 3 or 4 times per grazing season with more than 10 to 15 head each time, a drift fence will be constructed in areas without natural barriers.

Rationale

Monitoring will be necessary to determine compliance with livestock closure of Leslie Gulch Pasture and to determine whether a drift fence is necessary.

Noxious Weeds

Factors Which Influence Management Prescriptions

Noxious weeds present a substantial threat to all plants, including the special status species and their habitats. These exotics, capable of growing on a wide variety of soil types, are aggressive competitors, eliminating or replacing native vegetation. Three noxious weeds have been identified in the Leslie Gulch ACEC: Scotch thistle (*Onopordum acanthium*), whitetop (*Cardaria draba*) and St. John's wort (*Hypericum perforatum*).

Scotch thistle has been found in road corridors from the overlook to the **Owyhee** Reservoir; five sites of **whitotop** are established adjacent to the Leslie Gulch Road with the colonies extending into native vegetation. Within the past five years, increasing numbers of both of these species have been observed along the roadways east of the ACEC. St. John's wort has been found at one site in Slocum Creek and at one site near Mud Spring.

A Pesticide Use Proposal (PUP) has been developed by the Vale District for Leslie Gulch which permits limited chemical control of noxious weeds from the overlook site to the **Owyhee** Reservoir under the supervision of a BLM botanist or individual designated by the botanist. This PUP has been developed in accordance with the Northwest Area Noxious Weed Control Program EIS Supplement dated **05/05/87** and District wide weed control EA.

Manual control methods are somewhat effective for controlling scattered individuals of noxious weeds. In dense stands or when the weed species spread by rhizomes, manual control methods are much less effective. Generally, the most effective control is a combination of spraying when the plants are green and manual removal of any developed seed heads. Extensive and dense stands of noxious weeds make manual control extremely **costly** and ineffective. In these situations, the most satisfactory mode of control includes site-specific, carefully-controlled spraying in the spring. For whitotop, chemical application when the plants are green and budding, but prior to bloom, so that the herbicide can be translocated into the rhizomes, is most effective. Manual control of scattered Scotch thistle and St. John's wort is effective.

1. Objectives

Control infestations of noxious weeds found within the Leslie Gulch ACEC while protecting the special status plant populations from inadvertent impacts from weed control practices. -

a. Actions

Continue existing combination of manual and chemical weed control methods. All chemical control actions will be done on a site-specific basis and will be monitored on-site by a botanist to eliminate chances for impacts to special status plant species. Manual control methods would be used where they would be effective.

If chemical control is necessary, application would be according to the Vale District Five Year Integrated Weed Control Plan and EA. Chemical

application would use methods that would apply chemical targeted to individual plants.

Rationale

The spread of noxious weeds represents a substantial threat to the populations of special status plants and to the preservation of the natural biological setting of the ACEC and WSAs. Several species of noxious weeds are established within the ACEC and others are nearby. Since these infestations are still small, eradication remains feasible. Careful use of control methods will substantially reduce the potential for negative impacts to special status plants. Biological controls have not been found for **whitotop** or Scotch thistle.

2. Objective

Protect special status plant habitat by reducing the potential for introduction of additional noxious weed seeds to the ACEC.

a. Action

Clean road maintenance equipment prior to moving into the ACEC.

Rationale

Road maintenance equipment can carry plant seeds within soil upon the equipment. Road graders and other equipment working in weed infested areas can transport weed seeds to other areas when they move.

3. Objective

Reduce the potential sites for new infestations of weeds by reducing the amount of bare ground within the ACEC.

a. Actions

1. Seed selected sites of low seral vegetation to native species where noxious weeds have been found or could grow within the ACEC.

2. Seed areas disturbed during road maintenance to native species where the seeding will not adversely impact special status plant habitat.

Rationale

Freshly disturbed soil and other areas of bare ground provide natural habitat for the pioneering habit of noxious weed species. Vegetation established on these sites consumes the available soil moisture and nutrients leaving less available for newly establishing weed species. Potential invasion by other species, such as the

knawweeds (*Centaurea spp.*) and yellow star thistle (*Centaurea solstitialis*), presents additional threats to native plants.

Special Status Plants

Factors Which Influence Management Prescriptions

Five plant species found within the canyon are candidates for listing under the federal Endangered Species Act. All are associated with the unusual volcanic ash formations found in the area. Ertter's groundsel (*Senecio erterae*) is a category 1 species while the other four are category 2. These include Packard's blazing star (*Mentzelia packardiae*), Grimy ivesia (*Ivesia rhypara* var. *rhypara*), Owyhee clover (*Trifolium owyheense*), and Sterile milk-vetch (*Astragalus sterilis*). Three uncommon plant species, Packard's sagebrush (*Artemisia packardiae*), Mackenzie's phacelia (*Phacelia luta* var. *mackenziorum*) and bare-stemmed buckwheat (*Eriogonum novonudum*) are also found in the ACEC. Ertter's groundsel and Packard's blazing star have been listed by the state of Oregon as threatened, and grimy ivesia and sterile milk-vetch were proposed for addition to the state list in 1993.

None of the special status plant species in Leslie Gulch are listed as either endangered or threatened under the Endangered Species Act of 1973. However, as candidate species, five of the species are managed under BLM policy which states that "The BLM...shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as Threatened or Endangered." (BLM Manual 6840.06-C)

1. Objective

Maintain viable populations of the five special status plant species found in the Leslie Gulch ACEC on all suitable habitat.

a. Actions

1. If a special status plant species appears to be threatened with immediate extinction, the species will be introduced into identified suitable habitat. This action would be considered following consultation with the U.S. Fish and Wildlife Service, the Oregon Department of Agriculture, and other experts.

2. Periodically collect a limited number of seeds and cooperate with the Center for Plant

Conservation to maintain a seed bank for the five special status plant species.

Rationale

Reintroductions and seed collections of the special status plants will help insure that the species' genetic material will be maintained should stochastic events beyond human control severely deplete population numbers.

2. Objective

Reduce and eliminate where possible impacts of human activities on suitable habitat for special status plant species.

a. Actions

1. Install site-specific trail segments, fences and/or signs if monitoring indicates a need to protect special status plants or their habitat. These actions will be considered if any impact occurs to any special status plant site.

2. Actions which have been addressed in other parts of this plan and in the MFP amendments will aid in meeting objectives of special status plant species management include: (1) aggressive weed control measures, (2) withdrawal from mineral entry, (3) acquisition of the private land parcel, (4) installation of a locked gate in Dago Gulch, (5) elimination of livestock grazing from the Leslie Gulch pasture, (6) modified road maintenance practices at special status plant sites, (7) elimination of recreational livestock use, (8) elimination of Back Country Byway and Watchable Wildlife designations, and (9) minimal development of recreation facilities.

Rationale

One of the primary purposes in designating Leslie Gulch as an ACEC was to protect the special status plant species and their habitats found there. Many populations of these species are accessible to both direct and indirect human activities. Specific management of the species and their habitats, which requires a broad range of measures is necessary to control potential threats to their existence and to maintain viable populations of these species within their natural setting.

Wildlife

Factors Which influence Management Prescriptions

Bureau policy states that candidate species such as California bighorn sheep will be treated as priority species in all land use plans. Management direction provided by the MFP was to manage the habitats of special status wildlife species in a manner that would favor their perpetuation and/or expansion, to provide forage for big game, and to assure that land use authorizations perpetuate or enhance existing habitat characteristics of critical wildlife use areas.

The Leslie Gulch Habitat Management Plan (HMP) for California bighorn sheep includes the Leslie Gulch ACEC area. Through the HMP, one bighorn sheep water development and fence modification for bighorn passage has been completed in the ACEC.

Bighorn sheep are captured periodically by ODFW for relocation to unoccupied ranges. In 1988, the Malheur County Bighorn Sheep Reintroduction Plan and Memorandum of Understanding (MOU) was signed by BLM Vale District and ODFW. Reasonable numbers for the Leslie Gulch bighorn herd unit were established at 250 to 300 animals, and capture and release of bighorn sheep was also authorized.

Bald eagles, listed as threatened under the Endangered Species Act, winter along the Owyhee River but have no known roost sites such as large cottonwoods within the ACEC. No site specific information is presently available. Other special status wildlife species with potential habitat in the ACEC include Townsend's big-eared bat (category 2 federal candidate), Mohave black-collared lizard (Bureau Sensitive), and the western ground snake (Bureau Tracking).

1. Objectives

Protect relevant and important ACEC values while allowing management of California bighorn sheep.

a. Actions

1. Base bighorn sheep transplant operations at **Slocum Creek Campground**. Require ODFW to submit a proposal to BLM for evaluation of environmental impacts and approval if other sites are needed for operations. Require ODFW to submit a proposal to BOR for evaluation of environmental impacts and approval if BOR withdrawn lands along Owyhee Reservoir are **needed**.

2. Review ODFW placement of wormer blocks or feed supplements for bighorn sheep to evaluate impacts to ACEC values. Placement will require approval by **BLM**.

Rationale

California bighorn sheep are one of the Relevant and Important Values of the ACEC and management is necessary to maintain a healthy population. Slocum Creek Campground is **already** used for camping and no further impacts on ACEC values would result from ODFW base operations at that location. Negative impacts on BOR withdrawn lands will be avoided by **BOR's** evaluation process. Potential damage to special status plant sites or other ACEC values will be avoided through the evaluation process if ODFW needs other areas for operations. BLM review of the placement of wormer blocks and feed supplements will assure that there no negative impacts to the Relevant and Important Values of the ACEC.

2. Objective

Avoid or mitigate conflicts between recreational use and special status or other wildlife species.

a. Actions

1. Collect baseline data on bald eagle winter use, **raptor** species nesting sites, and other special status wildlife species in the ACEC.

2. Coordinate **with** and support ODFW inventory and monitoring efforts.

3. Restrict or close areas to recreational uses during critical seasons if conflicts occur.

Rationale

In areas where there is high recreational use, there is a potential for **visitor/wildlife** conflicts to occur. **Little** is known about the presence and distribution of special status wildlife species in the ACEC other than California bighorn sheep. Bighorn sheep, as well as big game species and upland game birds, are currently monitored by ODFW. Of particular concern are **raptor** nests, bat roosts and bighorn sheep lambing areas that could be disturbed by rockclimbing or other recreational activities. If conflicts are identified, restrictions or closures would be necessary to protect wildlife resource values.

Fire

Factors which Influence Management Prescriptions

The Vale District Fire Management Activity Plan establishes guidelines for selecting fire suppression methods for individual fires within the district. These guidelines consider resource conflicts of the various fire suppression methods available and the severity of burning conditions. Fire suppression personnel must consider the trade-offs between impacts to other resources of the area and the effectiveness of selected fire control measures. Full fire suppression efforts, which include crawler tractor-constructed fire lines, may not be appropriate in areas such as Leslie Gulch where impacts to the visual resource are of primary concern. Under these guidelines no earth moving equipment may be utilized in any identified special status plant or archaeological site.

The Interim Policy and Guidance for Lands Under Wilderness Review specifies that fire control methods be selected which are most effective while being least damaging to wilderness values. This document also sets policy for revegetation activities within Wilderness Study Areas: to the extent feasible, emergency seeding and planting will utilize native species and that use of mechanized cross country travel will be avoided. These constraints currently apply only to the Wilderness Study Area portions of the ACEC.

If the **WSAs** are designated as wilderness, BLM Wilderness Policy would be followed for fire control. This policy requires that all fire suppression techniques be analyzed to insure that they meet wilderness management objectives with the minimum adverse impact on the wilderness resource.

Fire suppression on public lands often is required to prevent fire from spreading to adjacent lands. The private owner of the lands to the south of Leslie Gulch uses these lands for livestock grazing. Fire which spreads from the public lands can destroy privately-owned forage and range developments.

Naturally occurring fire is a part of the ecosystem of all of eastern Oregon. Native plant and animal communities have evolved with periodic fire.

1. Objective

Protect the Relevant and Important values of the ACEC from impacts from fire suppression activities while limiting the potential for fires to spread from Leslie Gulch to adjacent private lands.

a. Action

Retain the Vale District Fire Management Activity Plan as the overall guidance for fire suppression activities within the ACEC.

Rationale

The Fire Management Activity Plan highlights **ACECs and WSAs** for special consideration when wild fire occurs within or approaches them. These fires have personnel assigned who monitor the fire suppression efforts to control impacts to the special values noted within these areas. IMP and Wilderness Management Policy guidance is incorporated into the provisions of the Activity Plan.

b. Action

The Interim Policy and Guidance for Lands Under Wilderness Review will continue to be followed for fire suppression activities within the ACEC if the **WSAs** are not designated as wilderness. This guidance would apply to the entire ACEC.

Rationale

The Interim Policy and Guidance for Lands Under Wilderness Review specifies that fire suppression methods be selected which are most effective while being least damaging to wilderness values. Although this guidance does not completely rule out the use of mechanized earth moving equipment, it requires that this method of fire suppression be used only as a last resort. Occasional extreme fire conditions may require the use of a variety of suppression methods. This policy is appropriate for protecting the Relevant and Important Values of the ACEC.

2. Objective

Retain fire management alternatives which could be used to enhance the Relevant and important and wilderness values found within the ACEC.

a. Action

Prescribed or naturally occurring fire may be utilized when specific management objectives are identified to enhance ACEC or wilderness values.

Rationale

Low intensity fire can be used to achieve a wide variety of management objectives, generally aimed at manipulating vegetation. In Leslie Gulch these objectives would likely be to retain naturally occurring vegetation or to return a portion of the ACEC to a more natural vegetative community.

Recreation

Factors Which Influence Management Prescriptions

Whileremaining relatively unknown, the popularity of Leslie Gulch is increasing. In recent years, the area has received media attention in various regional and national publications. BLM's wilderness review process has also attracted public interest to the area.

Management direction for recreation in the area is provided in the Northern Malheur Management Framework Plan (MFP) and in the Interim Management Policy and Guidelines for Lands under Wilderness Review (IMP).

The MFP provides for legal motorized access with an off -highway vehicle (OHV) Limited use designation which restricts vehicle use to the existing Leslie Gulch, Dago Gulch and Steamboat Ridge roads, Development of trail heads, trails, the boat ramp, sanitation facilities, campgrounds/picnic areas; VRM Class II management; and managerial signing and dispersed recreational use are also provided for in the MFP.

Through a Memorandum of Understanding (MOU) with the Bureau of Reclamation (BOR), the BLM manages recreational uses on a 340 acre BOR parcel located between the ACEC and the high water level of Owyhee Reservoir. This MOU may be revised as mutually agreed. The boat launch facilities were developed in partnership with Malheur County and the Oregon Department of Parks and Recreation to provide recreation uses not otherwise available in the Leslie Gulch area. Presently, there is no docking facility to provide safety for the boating public.

Sport rock climbing has recently expanded within the ACEC and specific management guidance regarding this activity has yet to be developed in the BLM. In the Vale District, there is a moratorium on the placement of fixed anchors and the use of portable power tools in WSAs until additional management direction is developed. Rock climbing can impact recreation by affecting the area's scenic resources, cultural and wilderness values, soils and vegetation.

1 Objective

Maintain the existing roaded natural, semiprimitive motorized and primitive recreational settings, and protect the ACEC's outstanding scenic values while providing limited developed recreational facilities and motorized access.

a. Action

The existing lockable gate at the Overlook will be retained to provide for visitor safety and resource protection,

Rationale

Road damage from heavy watershed runoff or flash flooding of Leslie Gulch can create unsafe driving conditions or make the area temporarily inaccessible by automobiles. The ACEC could also require temporary access restrictions due to other unforeseeable circumstances for the purpose of protecting important resource values or for public safety.

b. Action

Specific project plans will be developed prior to implementing management actions for developed facilities. Provision for the physically challenged will be a component of project plans and of upgraded maintenance of certain existing facilities.

Rationale

Project plans will ensure design and development of facilities is no greater than that required to meet public needs within the scope of this plan, while allowing appropriate protection of the area's high scenic qualities and other important values.

c. Action

A signs plan for administrative and interpretive needs will be developed, implemented, maintained and revised as needed for the ACEC with concern for the area's high scenic qualities. Signage will coordinate with a brochure/pamphlet about the ACEC.

Rationale

A signs plan will determine the scope and type of signage required to assist resources protection and visitors' enjoyment of the area without negatively impacting the Relevant and Important Value of high quality scenery. Written literature will provide information about resource values, user ethics and safety tips, rules of use in the area, the BLM, and other appropriate subjects.

Rock Climbing

d. Action

At rock climbing sites, there will be no alteration of hand/foot holds, and temporary hardware will not be left on walls or climbing sites.

Rationale

The Einstein climbing site and other climbing sites may be visible to primary back country access routes and the Leslie Gulch Road. The artificially altered hand/foot holds and various types of climbing equipment result in visual impacts which are visible to many visitors to the ACEC. Removal of temporary equipment when climbers leave the sites will significantly reduce the impacts to the natural setting of the ACEC and to those recreationists seeking to enjoy a primitive recreational experience.

e. Actions

1. If monitoring indicates that ACEC or wilderness values are being significantly impacted by climbing activities, then group size and frequency of use **will** be limited or all rock climbing eliminated. Impacts on special status species will be mitigated as described under Wildlife 2a and special status Plants 2a of this plan. Impacts on cultural resources, accelerated soil erosion, soil compaction beyond specified limits, or evidence of accumulative trash or human feces will require use limitations to preclude further impacts. **A twenty percent** increase of bare soil at a site will require employment of use restrictions. Visitor use may resume at sites if reestablishment of native plant species covers at least eighty percent of the original bare soil measurement. Site-specific use restrictions may be employed if over fifty percent of surveyed non-rock climbing visitors have had their opportunities for outstanding solitude or primitive recreation significantly impacted by rock climbing activities. **If** surveys are not available, that determination will be made by an interdisciplinary BLM evaluation.

2. There will be no competitive or commercial rock climbing activities in the ACEC.

Rationale

Concentrated use at climbing sites could cause damage to vegetation, accelerated soil erosion, disturbance of wildlife or disturbance of cultural sites along the access trails or at the climbing sites themselves. These disturbances could result in visual impacts which exceed the visual resource management class II or exceed acceptable levels of impact to the wilderness values of naturalness, primitive setting and solitude. Organized competitive or commercial climbing events attract large groups of people. As with any commercial venture on public lands, the exploitation or promotion of rock climbing requires BLM authorization.

f. Action

The use of chalk or other drying agents by rock climbers will be mitigated by removal of any contrasting deposits on rock walls which are visible from the primary access routes used by other ACEC visitors before leaving the climbing sites. Removal techniques must leave no scarring on the rock surface. Inadequate cooperation by climbers may result in prohibition on the use of certain drying agents or further restriction on climbing activities within the ACEC. BLM will post trailhead registers and notify known rock climbers in the area.

Rationale

The use of drying agents on the hands is a recognized safety factor for rock climbers. The use of some drying agents, especially white chalk, results in highly contrasting deposits on the red colored rock in Leslie Gulch. Deposits of contrasting chalk and intentional marring of the rock surface are unnatural and to some visitors an abusive visual intrusion on the naturalness of the area. Appropriate substitutes are available and should be used to preserve the naturalness of the ACEC. The responsibility to reduce the impacts of chalk use rests with all rock climbers.

g. Action

A cooperative agreement, such as an MOU, will be developed with the rock climbers for implementing management actions, monitoring of use, minimizing resource impacts, promoting climbing ethics, developing a search and rescue plan and other climbing related subjects. Unsuccessful agreement efforts or inadequate cooperation and assistance from rock climbers will result in further BLM imposed restrictions on or complete removal of rock climbing activities in the ACEC.

Rationale

An instrument is needed to coordinate with the rock climbers who use ACEC to ensure critical elements of this plan for rock climbing are carried out. A cooperative agreement would mutually benefit rock climbers and BLM. The agreement is an excellent tool to mutually ensure continued communication and cooperation, provides rock climbers a direct and active role in managing their own activity, and formalizes understanding for the continuance of certain rock climbing activities within the constraints of the ACEC plan.

Dispersed Recreation

h. Action

Site-specific signs or trail segments will be developed or restrictions on visitor use will be employed if monitoring indicates a need to protect significant resource values. Use limitations include but are not limited to those described under Wildlife **2a**, special status Plants **2a** and Recreation **1e**. Unnecessary primitive trail establishment will be closed and reclaimed. Primitive and tread developed trails will be kept to the minimum needed for reasonable access and resource protection.

Rationale

Concentrated visitor use can impact natural values. special status species can be impacted or areas of accelerated soil erosion can be created. Trails can be used to route visitors away from sensitive resource values. Minimizing trail development and sign placement would enhance the naturalness and high visual qualities of the ACEC.

i. Action

An Owyhee Breaks trailhead will be provided at an established pullout/parking area. Site specific treaded trail segments will be established only to protect important ACEC or wilderness values. The Owyhee Breaks trail route will cross the ACEC south to north. This backcountry trail corridor will be developed if user demands indicate a need for providing an identifiable route from the Owyhee Reservoir Resort south to the Birch Creek Historic Ranch on the Owyhee National Wild River.

Rationale

The presence of the Leslie Gulch Road makes the ACEC a logical location for trailhead establishment in this region's largely unroaded country. The Owyhee Breaks trail is designed to be a non-treaded, point-to-point type of hiking route. Treaded trail may be site-specifically established in order to protect ACEC or wilderness values.

j. Action

A back country visitor access permit system will be implemented if monitoring indicates a need for the protection of resource values. The permit system will be initiated if mitigation standards such as described under Wildlife **2a**, special status Plants **2a**, and Recreation **1e** and **1h**, or the establishment of vehicle pullout/parking sites

be insufficient to protect important resource values or to provide high quality opportunities for back country solitude. The permit system may be incrementally implemented, depending on the extent or severity of impacts occurring.

Rationale

The purpose of a back country visitor access permit system is to limit visitor levels thus providing continued opportunities for solitude and to prevent damage to important natural, cultural and scenic values of the ACEC and WSAs. Back country use of the ACEC is increasing. Repeated use has created trails in some locations. If unacceptable impacts occur, limits may be needed to reduce the levels of use.

Special Use Permits

k. Action

Any, activity requiring the BLM issuance of a special use permit (special recreation use permits, land use permits) or other special authorizations will normally be limited to a maximum of six persons. Specific exceptions may be allowed.

Rationale

Physical impacts caused by concentrated use by larger groups, including soil compaction, vegetation damage and removal, and extended disruption of wildlife will be reduced. Vehicle congestion and social contact between parties in the back country will also be reduced.

Off Highway Vehicle Use

l. Action

The present Limited OHV use designation will be retained to restrict vehicle traffic to the Leslie Gulch and Steamboat Ridge roads. Vehicle access to Dago Gulch will be consistent with the existing private right-of-way and controlled with a locked gate located on public lands approximately 0.8 miles north of the existing gate. The remainder of the ACEC will remain closed to off -highway vehicle use. Signs and patrols will help minimize vehicle trespass into the Honeycombs WSA along Steamboat Ridge.

Rationale

This action protects the Relevant and Important Values of the ACEC. The IMP is met by limiting vehicle use to existing roads and ways within the area, thus protecting wilderness values, including naturalness and outstanding opportunities for

primitive recreation uses and solitude. The Steamboat Ridge Road is left open to provide access beyond the ACEC.

Special Designations

m. Action

The Back Country Byway and Watchable Wildlife designations will be removed. The Wilderness Study Area, Special Recreation Management Area, and Resource Natural Area designations will be retained.

Rationale

Removal of these designations will remove the Leslie Gulch ACEC from BLM's national level promotional programs and reduce the rates of increased use expected for this area in the future. Increased visitor use will have additional impacts upon all of the special natural resource values contained within the ACEC.

Developed Recreation

n. Action

The restroom adjacent to the 40 acre private parcel will be moved to Dago Gulch and a day use parking area developed at Dago Gulch if the private land or easement is acquired by BLM. As an alternative, a restroom and pullout/parking area will be relocated to upper Leslie Gulch. A small pullout/parking area will be provided at upper Leslie Gulch until a determination for the private Dago Gulch parcel is made.

Rationale

Since four major drainages and two roads merge near the mouth of Dago Gulch, the area receives high levels of recreational use and has been somewhat impacted by this use. This location is the first area west of the Overlook which can physically accommodate any concentration of parked vehicles or visitor facility development. A designated parking area will help protect resource values by preventing off road driving and parking. Natural features allow for screening of developed facilities in this area. Visitors are currently parking off of the Leslie Gulch Road at upper Leslie Gulch impacting vegetation there.

o. Actions

1. A vehicle access loop and approximately 10 campsites each with a table, grill and vehicle parking will be developed at the Slocum Creek campground within the existing campground area. Revegetation with native plant species will be accomplished as appropriate. Table shades

may be provided at no more than half of the tables.

2. The existing 14 day maximum camping limit may be shortened for Slocum Creek to no less than seven days if the campground is full over fifty percent of the time during its highest two month use period.

Rationale

Due to the area's remoteness, most reservoir boating parties stay longer than one day. Camping at Slocum Creek provides a level of security for watercraft of reservoir boat users, and gives opportunity for extended stays by persons desiring to further explore and enjoy the values of the ACEC. Land based recreationists also utilize the camping opportunities offered at Slocum Creek. Restricting development to the presently disturbed area keeps concentrated use activities over 200 feet from a known special status plant site near the campground. The proliferation and scarring of unsightly dispersed rock fire pits is avoided and fire safety is enhanced by placement of fire rings. Individual campsites provide designed spacing between camping parties to enhance the camping experience, and prevents overcrowding at the campground. Shading provides for more bearable camping conditions during the intense summer heat of the canyon.

p. Action

Potable water will not be developed within the ACEC.

Rationale

There has been little public demand for developed water within the ACEC. Without developed water, the average length of camping stay at Slocum Creek campground will likely remain shorter than if water were provided, thus maintaining a lower rate of increased use while providing more visitors the opportunity to camp in the ACEC. Day use visitors of the ACEC can readily carry enough water to meet their needs.

q. Action

Additional day use and boat trailer parking, a safety dock, a fish cleaning station, and a waste disposal facility provided for floaters of the Cwyhee Wild and Scenic River will be provided.

Rationale

These facilities are located adjacent to the ACEC on BOR withdrawn lands, and are administered by BLM for recreational purposes through an

interagency agreement. This portion of the ACEC receives very heavy levels of use in the spring.

River floatboaters are required to carry out and properly dispose human solid waste from the wild river corridor. Presently, approximately 65 percent of the **Owyhee** River floatboaters take out at Leslie Gulch. Plastics and other trash are very **difficult** to remove from vault restrooms. Since the river floatboating season is short, the disposal unit may be an annually placed temporary structure.

r. Action

Temporary overnight facilities may be provided at the Slocum Creek Campground for a BLM visitor contact/resource protection employee. This facility will be used during the peak recreational use season.

Rationale

The ACEC is a two hour drive from the BLM district office. Temporary housing will improve **BLM's** efficiency when providing for visitor services, initiation of a permit system, resource protection and monitoring of visitor uses and resource values.

s. Action

Camping and ground fires will be restricted to the Slocum Creek campground.

Rationale

Destruction and damage to the **ACEC's** limited amount of dead woody vegetation will be reduced. The visual character of the natural landscape will be protected by eliminating the contrasting presence of fire rings, charcoal and destroyed vegetation.

Monitoring

A specific monitoring plan ~~for the~~ Leslie Gulch ACEC will be incorporated into the final ACEC Management Plan. Monitoring objectives, the type of monitoring and methods used will be based on the actions and objectives found in the final ACEC Management Plan.

Monitoring provides information about the interrelationships of various physical, biological, and social variables and their impacts on resources. This information is evaluated and used to determine if plan objectives are being met. All types of monitoring activities outlined will include the following steps:

- 1) monitoring objectives established
- 2) baseline information collected
- 3) monitoring actions repeated over time using .. consistent standardized procedures
- 4) monitoring results interpreted relative to the baseline information and the monitoring and implementation objectives

Protest Procedures

The protest procedures for the ACEC Management Plan are informal as opposed to the formal procedures for the MFP Amendment found in the previous section. Anyone may protest the ACEC Management Plan within 30 days after the Notice of Availability is published in the Federal Register by delivering a written protest to:

Ralph Heft, Malheur Resource Area Manager
Vale District Office
Bureau of Land Management
100 Oregon Street
Vale, Oregon 97918

After consideration of any protests of this proposed ACEC Management Plan, a Final ACEC Management Plan will be published. There will be an opportunity to make a **formal** appeal of the final ACEC Management Plan to the Interior Board of Land Appeals at that time.

Appendix I

Implementation

Implementation of the actions described in the proposed MFP amendments and the proposed ACEC Management Plan, as well as ongoing maintenance in the ACEC have been listed in the following table. Five time frames have been identified: immediate, short-term, long-term, ongoing, and as needed. Immediate actions are those which will be implemented within one year after the final plan goes into affect. Short-term actions should be completed within two to five years after plan approval. Long-term actions should be completed within six to ten years after plan approval. Ongoing actions are those that are currently taking place and will continue, or those actions which will continue after immediate implementation. As Needed actions have no scheduled time frames and will only be implemented if monitoring indicates a need for the action.

Approximate costs in 1994 dollars for specific actions are given in the appropriate time frame column. Equipment and replacement costs for physical improvements have been amortized within the cost targets. An X indicates that the action will be completed within that time period with no cost.

Time Frames and Projected Costs

Action	Immediate	Short-term	Long-term	Ongoing	As Needed
<i>MFP Amendments</i>					
Pursue acquisition of 40-acre parcel				\$15,000 plus purchase	
Remove livestock grazing from Leslie Gulch pasture	\$3500				
Remove ACEC from Three Fingers HMA	X				
Removal of recreational domestic livestock use	X				
Locked gate and fence installed at Dago Gulch		\$5000			
Correct ACEC acreage	X				
Day use only in ACEC other than Slocum Creek Campground	X				
Close ACEC to vegetation and mineral gathering	X				
Existing fixed anchors only at Einstein climbing site. Climbing routes at Einstein closed over 5-year period	\$2000	\$7000			

Time Frames and Projected Costs

Action	Immediate	Short-term	Long-term	Ongoing	As Needed
<i>ACE C Management Plan</i>					
Construction of up to 4 pull-out/ parking areas					\$4000/each
Identify opportunities to reduce road maintenance/special status plant conflicts	\$500				
Maintain roads				\$2500/year	
Roadside seeded with native plants					\$1000-5000
Drainage crossings maintained o r improved					\$5000-70,000
Erosion control on Steamboat Ridge Road	\$1000				
Increased patrols and WSA boundary signs on Steamboat Ridge Road	1000			\$1000/year	
Reclamation on 40 acre private parcel, if acquired					\$3000
ACEC withdrawn from locatable and saleable mineral development	\$10,500	\$4000			
Mineral leasing in ACEC restricted to no surface occupancy				X	
Establish additional vegetative monitoring in Bannock pasture	\$200			\$200/year	
Construct drift fence					\$2000-4000
Range use supervision				\$1750/year	
Existing combination of manual and chemical weed control	\$1000-4000			\$1000-4000/year	
Clean road maintenance. equipment prior to moving into ACEC				\$300/year	
Seed native plants at selected sites for weed control	\$1000-3000				\$1000-3000
Monitor for weeds	\$500			\$500/year	
Introduce special status plants into suitable habitat					\$2000
Collect special status plant seeds for seed bank	\$500			\$500/year	

Time Frames and Projected Costs

Action	Immediate	Short-term	Long-term	Ongoing	As Needed
Install site-specific trail segments, fences, signs to protect special status plants or their habitat					\$2000-15,000
Special status plant monitoring	\$40005000			\$2000-5000/year	
Base ODFW bighorn transplant operations at Slocum Creek Campground. Other sites needed evaluated and approved prior to operations					\$1700/site
ODFW placement of wormer blocks/feed supplements evaluated and approved by BLM					X
Special status wildlife surveys conducted in ACEC		\$10,000-30,000			
Support ODFW wildlife inventory and monitoring in ACEC				X	
Restrict/close areas where wildlife/recreation conflicts occur					\$0-3500
Move restroom to Dago Gulch and maintain; develop day use parking area if private land acquired		\$20,000		\$1000/year	
Ten campsites developed and maintained at Slocum Creek Campground		\$30,000		\$5000/year	
Shorten 14 day maximum camping limit at Slocum Creek Campground					\$ 5 0 0
Maintain gate at Overlook				\$200/year	
Develop project plans for developed facilities		\$10,000			\$0-7000
No development of potable water				X	
Additional parking, safety dock, fish cleaning station, and waste disposal facility provided and maintained at boat launching area		\$60,000		\$4500/year	
Temporary overnight facilities provided and maintained at Slocum Creek Campground for BLM employee	\$20,000			\$5000/year	*
Vehicle traffic restricted to Leslie Gulch and Steamboat Ridge roads.	\$500				

Time Frames and Projected Costs

Action	Immediate	Short-term	Long-term	Ongoing	As Needed
Back Country Byway and Watchable Wildlife designations removed	\$2000				
Dispersed recreation limited to day use only. Camping and ground fires only at Slocum Creek Campground	\$500				
Site specific signs or trail segments developed and maintained to protect significant resource values					\$5000-20,000
Owyhee Breaks trailhead at established pullout/parking area		\$2000			
Activity requiring special use permits normally limited to six person maximum					\$7000-25,000
Vegetation or mineral material permits issued only for scientific or educational purposes					\$500-2000
Back country visitor access permit system implemented and maintained					\$0-65,000
Rock-climbing hand/foot holds not altered, temporary hardware removed, BLM approval required for maintenance or removal of artificial constructs. Maintenance limited to camouflage	\$3000	\$15,000			
Rock climbing group size and frequency limited. No competitive or commercial rock climbing.					\$0-5000
Chalk, other drying agent use mitigated	\$1000			\$1000/year	
Develop and implement cooperative agreement with rock climbers	\$7000	\$5000			
Develop/maintain a Signs Plan	\$7000				\$0-3500
Develop/maintain ACEC literature	\$15,000				\$10,000-20,000
Implement IMP, monitor special values and visitation, provide resource and public protection measures	\$9000	\$120,000	\$175,000		
Maintain existing facilities				\$12,000/year	
Issue Special Rules for approved actions	\$3000				

Appendix II
Amended Environmental Assessment
Leslie Gulch
Area Of Critical Environmental Concern (ACEC)
Draft Amendment Of The Northern Malheur Management
Framework Plan
Draft ACEC Management Plan

FINDING OF NO SIGNIFICANT IMPACT

**Environmental Assessment OR-030-94-02 for the Leslie
Gulch Area of Critical Environmental Concern (ACEC)**

On the basis of the information contained in the Environmental Assessment and all other information available to me, it is the determination of the Bureau that none of the four alternatives constitutes a major federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is unnecessary and will not be prepared. In addition, the amendment to the Malheur Management Framework Plan does not affect the entire resource area and does not substantially affect other resource programs to the extent that the resource area would initiate an Environmental Impact Statement.



Ralph J. Heft
Malheur Resource Area Manager

3/25/94

Date

Readers Guide

This section contains the Environmental Assessment (EA) which has been amended in response to public comment. This document was mailed for a 60 day public review period in early January 1994. Some of the amendments have resulted in additions to the text. These are underlined in this document. Some small sections of the original EA have been deleted.

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Acronyms

ACEC - Area of Critical Environmental Concern

AUM - Animal Unit Month

BOR - Bureau of Reclamation

CA - Conservation Agreement

EA - Environmental Assessment

EIS - Environmental Impact Statement

FLPMA - Federal Land Policy and Management Act

HMA - Herd Management Area

HMP - Habitat Management Plan

IMP - Interim Management Policy and Guidelines for Lands under Wilderness Review

MFP - Management Framework Plan

MOU - Memorandum of Understanding

NEPA - National Environmental Policy Act

ODFW - Oregon Department of Fish and Wildlife

OHV - Off Highway Vehicle

PUP - Pesticide Use Proposal

ROS - Recreation Opportunity Spectrum

RPS - Range Program Summary

SRMA - Special Recreation Management Area

VRM - Visual Resource Management

WSA - Wilderness Study Area

Introduction

Areas are designated as ACECs when special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and provide safety from natural hazards. The Federal Land Policy and Management Act requires that the BLM give priority to the designation and protection of ACECs.

To be designated as an ACEC, an area must meet the criteria of "Relevance" and "Importance". To meet the "Relevance" criterion for ACEC designation, an area must have characteristics such as significant scenic values or habitat for sensitive or threatened animal or plant species. The relevant values or resources identified must also have substantial significance to meet the "Importance" criteria for ACEC designation. This means that the values identified must be more than locally significant and must have qualities which make the area fragile, sensitive, unique or vulnerable to adverse change.

Leslie Gulch was designated an Area of Critical Environmental Concern (ACEC) in 1983 in the Northern Malheur Management Framework Plan (MFP). This **11,653-acre** ACEC was identified to protect the relevant and important **values** of high quality scenery, California bighorn sheep habitat and special status plant species habitat. The objectives for management within the ACEC are to protect, conserve and enhance these values while authorizing the various activities which occur within the area.

Purpose and Need

The purpose of this document is two fold. First, alternative management actions to provide management direction for the Leslie Gulch ACEC are presented and analyzed. Secondly, those potential management actions which are not in conformance with the Northern Malheur Management Framework Plan (MFP) and thus require a land use plan amendment are also reviewed.

This draft ACEC Management Plan, the proposed plan amendments and associated Environmental Assessment (EA) are required by the Federal Land Policy and Management Act (FLPMA) of 1976 and the National Environmental Policy Act (NEPA) of 1969 which provides for public involvement and state and local government coordination. The management plan will provide guidance for management of the

ACEC for the next ten to twenty years. The MFP amendments will remain in effect until a new comprehensive resource management plan is developed for the Malheur Resource Area.

Management guidance for the ACEC is provided by the MFP for the Malheur Resource Area, approved in 1983 and the Northern and Southern Malheur Rangeland Program Summary (RPS), approved in 1984. The following is a summary, by activity, of the management guidance from these plans that is relevant to this plan amendment:

Lands. The MFP identified that BLM will consider acquiring private lands within **WSAs, ACECs or RNAs** in exchange for public lands outside those areas. Access or easements may be obtained to provide for public access or maintain scenic quality.

Minerals. The MFP recommends that the ACEC be withdrawn from surface occupancy for leasable minerals and be closed to the general mining laws for locatable and saleable minerals.

Livestock. Forage was allocated among competing uses. Pastures or areas to be excluded from livestock use were identified. Within the ACEC livestock use was allocated and objectives were identified for the Leslie Gulch and Bannock pastures of the Mahogany Allotment (0500).

Wild Horses. The current boundary and wild horse management numbers for the Three Fingers Herd Management Area (HMA) were identified. The HMA is to provide for between 75 and 150 wild horses and contains portions of the Leslie Gulch ACEC.

Conformance Statement

With the following exceptions, all of the alternatives considered in this environmental assessment are consistent with existing land use planning documents. Those management actions which do not conform and which, if selected, would require amendment of the Northern Malheur MFP are the following: 1) acquisition of a 40 acre private inholding. 2) elimination of livestock grazing in the Leslie Gulch pasture. 3) removal of the ACEC from the Three Fingers Wild Horse Herd Management Area. 4) closure of the ACEC to recreational domestic use. 5) closure of the ACEC to access from the Leslie Gulch Road. 6) correction of the ACEC acreage. 7) limiting the ACEC to day use only except at the Slocum Creek Campground. 8) elimination of installati ons of anchors for rock climbing.

and 9) elimination of vegetation and mineral gathering within the ACEC. All of these actions are included in the preferred alternative.

Setting

Leslie Gulch drains into the Owyhee Reservoir approximately 50 miles south of Ontario, Oregon, and 60 miles southwest of Boise, Idaho. The mouth of the gulch is at approximately 2600 feet above sea level, and the highest elevation is approximately 5300 feet on the eastern boundary of the ACEC. The boundary of the ACEC is generally defined by the watershed boundaries of Leslie, Slocum, Juniper, Dago and Runaway Gulches and their tributaries. The ACEC covers approximately 11,653 acres. Much of the southern boundary of the ACEC is the boundary between public and private lands to the south on Mahogany Mountain. Bureau of Reclamation (BOR) withdrawn lands abut the west boundary of the ACEC near the Cwyhee Reservoir.

The climate of the area is similar to that of the Great Basin and is one of extremes. Winter low temperatures can range well below zero, but typically are between 10 and 30 degrees. During the summer, highs generally are near or above 100 degrees daily. While average annual precipitation is near eight inches, actual rainfall amounts are unpredictable. Storm events can bring several inches of rainfall within a few hours. During these times, the otherwise dry gulches can turn into raging torrents which can block or wash out roads and trails. With the exception of a short section **below** Mud Spring, none of the drainages within the Leslie Gulch ACEC contain perennially flowing water. Surface water typically flows in the drainages for only a short time in the spring or following storm events.

The rugged, scenic topography of the ACEC area has formed primarily by the differential weathering of the Leslie Gulch Ash Flow Tuff. These rocks were deposited 15 million years ago by a rhyolite pyroclastic **flow**. This violent volcanic explosion, which can be compared to the 1980 Mount Saint Helens eruption, resulted in the filling of the geographic low created by the formation of the Mahogany Mountain caldera. This mobile, molten froth contained hot volcanic gases, volcanic ash and larger volcanic debris. As the deposit cooled and lithified into rock, gases were trapped **forming** the pitted, 'honeycomb' appearance of many of the rocks. Subsequent uplift, faulting and erosion has created the striking canyon vistas present today.

The variable soil types within the ACEC are primarily determined by **landform** and geologic type. The

weathering of volcanic rocks in Leslie Gulch develop soils which are rich in clays and highly erosive. Many drainages have well formed gullies, and rills are common on some hillsides. This erosiveness is due to the steepness of the landforms, the unconsolidated nature of the weathered volcanic ash, the precipitation pattern, and the poor vegetative cover which occurs in the desert setting. Young, shallow soils have developed on outcrops of soft ash deposits, which provide unique conditions needed for many of the special status plants.

The canyons of the Leslie Gulch ACEC support the highest concentration of special status plant species in eastern Oregon, five of which are candidates for listing under the Endangered Species Act. The general ecological setting encompasses a wide variety of plant communities. An unusual pattern of northern, **mesic** flora represented by a relict stand of Ponderosa pine, mountain mahogany, and rocky mountain maple are in close association to a southern, **xeric** flora composed of greasewood, shadscale, and spiny **hopsage**. When combined with the special status plant species, the vegetative elements of the ACEC give a floristic variety unexcelled in Malheur County.

Mule deer, Rocky Mountain elk and California bighorn sheep are found in the upland habitats of the ACEC and in adjacent lands. Upland game birds such as chukar partridge and California quail occupy much of the area. The rugged canyons also provide habitat for coyote, bobcat, and a variety of non-game migratory birds. Raptors, northern flickers and white-throated swifts use the numerous cliff crevices and cavities, which also provide potential habitat for bats. The area also provides excellent reptile habitat.

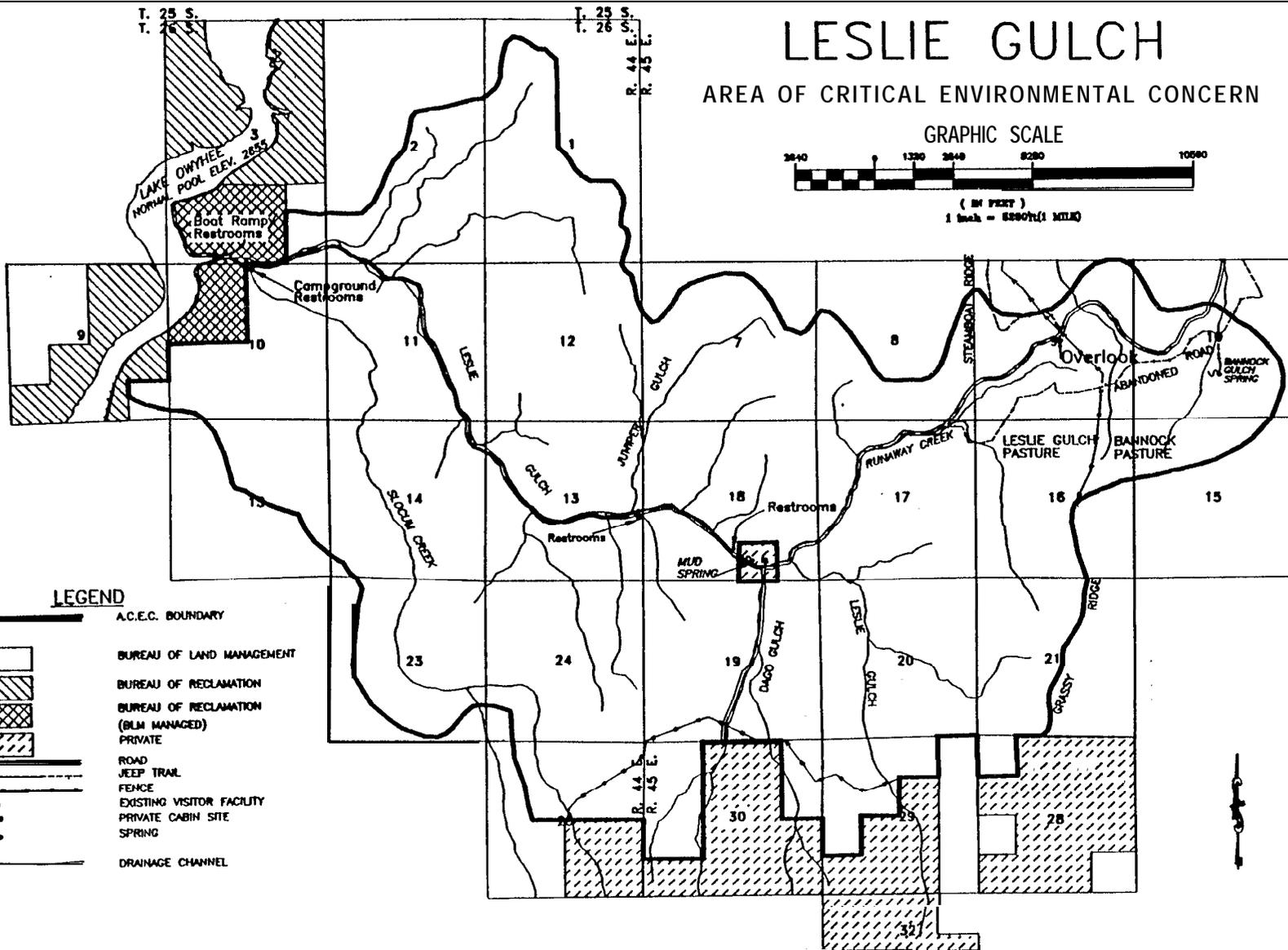
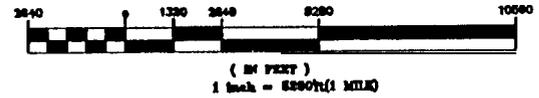
Leslie Gulch is popular for recreational use. Developed recreational opportunities include boating, fishing, camping and sightseeing. The boat launch facility is a favored takeout point for floaters on the Cwyhee Wild and Scenic River and provides the only launch facility on the upper Cwyhee Reservoir. Dispersed recreational opportunities include hiking, rockclimbing, hunting, outdoor photography and wildlife watching. Leslie Gulch and the surrounding area provides one of the few places in Oregon where bighorn sheep can be hunted. The rockclimbing routes within the ACEC are highly challenging.

Most of the ACEC is made up of portions of three Wilderness Study Areas (WSAs). The Slocum Creek, Honeycombs and Upper Leslie Gulch WSAs have all been recommended by the BLM for wilderness designation. The Oregon Wilderness Environmental

LESLIE GULCH

AREA OF CRITICAL ENVIRONMENTAL CONCERN

GRAPHIC SCALE



LEGEND

- A.C.E.C. BOUNDARY
- BUREAU OF LAND MANAGEMENT
- BUREAU OF RECLAMATION
- BUREAU OF RECLAMATION (BLM MANAGED)
- PRIVATE
- ROAD
- JEEP TRAIL
- FENCE
- EXISTING VISITOR FACILITY
- PRIVATE CABIN SITE
- SPRING
- DRAINAGE CHANNEL

Impact Statement identified all three WSAs as having a high degree of naturalness and outstanding opportunities for solitude or primitive and unconfined types of recreation.

The Leslie Gulch pasture of the Three Fingers temporary allotment makes up approximately 90 percent of the ACEC. The remainder of the ACEC is within the Bannock pasture of the same allotment.

The lands contained within the ACEC are public lands administered by the Bureau of Land Management. One 40-acre, privately owned parcel is located in T26S R45E Sec. 18 SW1/4 SE1/4, at the confluence of Leslie and Dago gulches. This property is not part of the ACEC. There is a cabin and perennially flowing Mud Spring is on the parcel. A 100 foot wide public easement crosses this private land, providing public access to the shore of Cwyhee Reservoir.

The lands surrounding Owyhee Reservoir are withdrawn for the use of the Bureau of Reclamation (BOR). Approximately 340 acres of these lands are currently managed by the BLM under a Memorandum of Understanding (MOU). These lands which are located at the mouth of Leslie Gulch are neither part of the ACEC nor part of the wilderness study areas, but are managed for compatibility with the ACEC.

Relevant And Important Values

Special Status Plants

Five plant species found within the canyon are candidates for listing under the federal Endangered Species Act. All are associated with the highly unusual ash formations found in the area. Two of these species, Enter's groundsel (Senecio enteriae - Category 1) and Packard's blazing star (Mentzelia packardiae - Category 2); grow predominantly on the greenish-yellow ash-tuff talus slopes. Grimy ivesia (Ivesia rhypara var. rhypara - Category 2) and Owyhee clover (Trifolium pwhveense - Category 2) grow on a shallow ash substrate. Sterile milk-vetch (Astragalus sterilis - Category 2) also is found scattered on ash deposits throughout the region. Three uncommon plant species, Packard's sagebrush (Artemisia packardiae), Mackenzie's phacelia (Phacelia lutea var. mackenziorum) and bare-stemmed buckwheat (Eriogonum novonudum) are also found in the canyons and bluffs of the ACEC. Ertter's groundsel and Packard's blazing star have been listed by the state of Oregon as threatened, and

grimy ivesia and sterile milk-vetch are proposed for addition to the state list in 1993.

Based on numbers and total acreage, grimy ivesia is the special status species in the ACEC. Its geographical distribution includes two small sites in northern Nevada and another small site in Lake County, Oregon. In addition to the Leslie Gulch sites, a site in northern Nevada has also been identified for Packard's blazing star. Ertter's groundsel grows in the Leslie Gulch vicinity and at two restricted sites near Birch Creek, a tributary of the Owyhee River approximately six miles southwest from Leslie Gulch. Cwyhee clover and sterile milk-vetch are endemic to the larger Cwyhee region, with the clover known only on sites east of the Owyhee River.

Scenic Values

The scenery within the ACEC is dominated by spectacular geologic formations created by the differential weathering of the Leslie Gulch Ash-Flow Tuff member of the Succor Creek formation. The tuff may be 2,000 feet thick in some places. Its great thickness, uniformity and relative resistance to weathering formed the impressive cliffs, outcrops and spires that characterize the area. As the volcanic rocks cooled, gases trapped inside led to the creation of the eerie and spectacular "honeycombing" effect in some areas, and is responsible for many skyline windows in the rock formations. The various ash layers present a variety of colors ranging from yellow to green and multiple shades of red. The areas' vegetation and intrusions of more resistant rhyolite dikes, frequently columnar in appearance, provide additional contrasting texture and color to the inspiring landscape.

Under the BLM Visual Resource Management (VRM) program, the ACEC is within a designated Class II area (See Glossary).

Bighorn Sheep Habitat

California bighorn sheep (Ovis canadensis californiana) are a Category 2 candidate for listing under the Endangered Species Act. In the early 1900s, bighorn sheep in Leslie Gulch were extirpated due to domestic sheep diseases and unregulated hunting. Seventeen bighorns were reintroduced in Leslie Gulch in 1965 and a second release of 15 head was made north of the ACEC in 1987. The herd has grown to a population of approximately 200-240 animals which range outside of the ACEC, utilizing a 120-square mile area on the east side of Owyhee Reservoir and the Owyhee River.

Leslie Gulch provides excellent habitat for bighorn sheep. The steep cliffs of the canyon offer escape cover for the animals, and the small natural shelters along the rock faces provide thermal cover. Grasses, forbs and shrubs provide ample forage. Mud Spring and Owyhee Reservoir provide perennial water. The remote, rugged wilderness study areas extending beyond the ACEC provide a large area with a low potential for human harassment of the bighorns.

Other Values

Access And Roads

The Leslie Gulch Road was originally constructed in the early 1900s as a wagon road from the community of Watson and the farming area along the Owyhee River for access to the east. At the urging of the Malheur County Commissioners, the present road was constructed from the Succor Creek Road to the Owyhee Reservoir in the late 1960's. This newly constructed road parallels the Leslie Gulch creek bed and follows a route with improved visibility and grade parallel to Runaway Creek.

Today, the Leslie Gulch Road provides public access to one of only four boat launch sites on Owyhee Reservoir, as well as recreational access to the Leslie Gulch area. A lockable gate near the ACEC's eastern edge could be closed if necessary for public safety in the event of water-caused road damage.

Two primitive roads are present within the ACEC, one up the bottom of Dago Gulch and the other along the top of Steamboat Ridge.

Mineral Resources

The mineral potential of the ACEC was analyzed by the U.S. Geological Survey in 1989 as part of the Wilderness Study Area evaluation process.

Portions of the ACEC have a moderate potential for occurrence of the locatable minerals uranium, thorium, gold, silver, lithium, arsenic, zeolite, mercury and zinc. Other areas are rated as having a low potential for zinc. The northern portion of the ACEC has been rated as having a high potential for the occurrence of gemstones (picture jasper). No economic deposits have been identified and there is no direct evidence of their occurrence. No mines, prospects, or mining claims are located within the ACEC and only casual use, non-surface disturbing activity can be expected.

The ACEC is not open for mineral leasing and no current mineral leases exist within the area. Portions of the ACEC have a moderate potential for geothermal resources and the ACEC has been rated as having no potential for other leasable mineral resources.

The salable minerals of sand, gravel and stone are not available for sale within the ACEC and no developments are located there. While large volumes of these materials exist, these would not be considered a resource since similar deposits exist elsewhere which are more accessible and closer to markets.

Livestock Grazing

The public land within the ACEC has been grazed by livestock for many years. The name Leslie Gulch was derived from Hiram Leslie, a early rancher in the area. Historically, the first grazing by livestock began in the late 1800s and was unregulated. The Owyhee River was the base of operations for a number of ranches near the ACEC. Early accounts describe extensive, yearlong use by sheep, cattle and horses. Livestock grazing continues to be an important part of the local economy and culture.

Approximately 800 acres of the Bannock pasture and all of the Leslie Gulch pasture are in the ACEC. The Bannock Pasture is on the eastern edge of the ACEC. Both pastures are within the Three Fingers temporary allotment. This allotment has 9,981 active and 4,653 suspended Animal Unit Months (AUMs) with four grazing permittees. Currently, the two pastures are used by two of the permittees, who use the Leslie Gulch pasture with 132 head of cattle and 264 AUMs from March 1 to April 30. The Bannock pasture is used by approximately 450 cattle from May 1 to October 31 in a deferred rotation grazing system with three additional pastures. Grazing use in the Bannock Pasture is deferred until after the critical growth period of key forage species (approximately July 1) two out of three years.

Recreation

The Leslie Gulch area has long attracted recreationists in search of a high quality outdoor experience. Elements of its attractiveness are its remote location with reasonable vehicular access and the opportunity to pursue outdoor recreation activities in a setting with relatively few man-made impacts. Within the ACEC, the area's natural attractions provide for exceptional scenic, geologic, botanical,

wildlife, and general sightseeing activities and outstanding opportunities for nature photography.

Under the Recreation Opportunity Spectrum of describing recreational settings, the majority of the **lands within** the ACEC provide a setting for primitive types of recreational use, while those corridors adjacent to and including the existing roads provide for **roaded** natural and semiprimitive nonmotorized types of recreation opportunities (see Glossary).

The 1985 development at Owyhee Reservoir of a concrete boat ramp with parking, fish cleaning station and the Slocum Creek campground with vault restrooms, has provided increased recreational use opportunities. The boat ramp is one of only four ramps developed on the reservoir and serves as the only boating access for the upper Owyhee Reservoir area. All improvements except the campground are located on BOR land outside of the ACEC. Through a Memorandum of Understanding (MOU) with the BOR, the BLM manages this area. Two additional vault restrooms are located within the Leslie Gulch canyon adjacent to the Leslie Gulch Road.

Higher recreational use of the area typically occurs before and after the hot summer season. The river floatboating season, the greening up of the desert, and higher water levels of Owyhee Reservoir typically attract the highest use levels during the spring. During the fall when day time temperatures begin to cool and hunting activities increase there is also increased use. Based on limited available seasonal road traffic information, indications are that an upward trend in nonboating visitation is **occurring** in the Leslie Gulch area. During those years when water storage in Owyhee Reservoir has provided reasonable boat ramp access from Leslie Gulch, approximately 50 percent of the area's visitation has occurred from April through June. The remaining 50 percent of annual recreational use occurs mostly from July through approximately mid-November. From 1976 through 1987, the average annual number of visitors to Leslie Gulch has been an estimated 8,360 persons. During the drought years of 1988 through 1992 total visitation was slightly lower, with a higher percentage of use occurring later in the season.

Leslie Gulch remains the primary takeout point for river floaters who put in at Rome on the Owyhee National Wild River. The latter part of the river floating season coincides with the reservoir boating use season, occasionally straining existing parking capabilities.

The multitude of side canyons and various ridge systems within the ACEC beckon the more adventurous visitor. The Leslie Gulch Road through the main canyon has made such nonmotorized recreational use opportunities more accessible than in most other areas of the Owyhee Breaks country. Dispersed primitive recreation activities include day hiking; geologic, botanic and wildlife viewing; general sightseeing; and hunting.

Upland bird and big game hunters seeking primarily chukar partridge and mule deer visit the area. A selected few people are annually licensed by the Oregon Department of Fish and Wildlife (ODFW) to hunt the prized bighorn sheep.

The Leslie Gulch bighorn sheep herd has been hunted since 1973, with 94 hunters taking 87 bighorn rams. This is one of 11 areas where California bighorn sheep are hunted in Oregon, and one of only four areas in Oregon where a nonresident bighorn tag is offered. There are presently two hunts in September with three hunters each season.

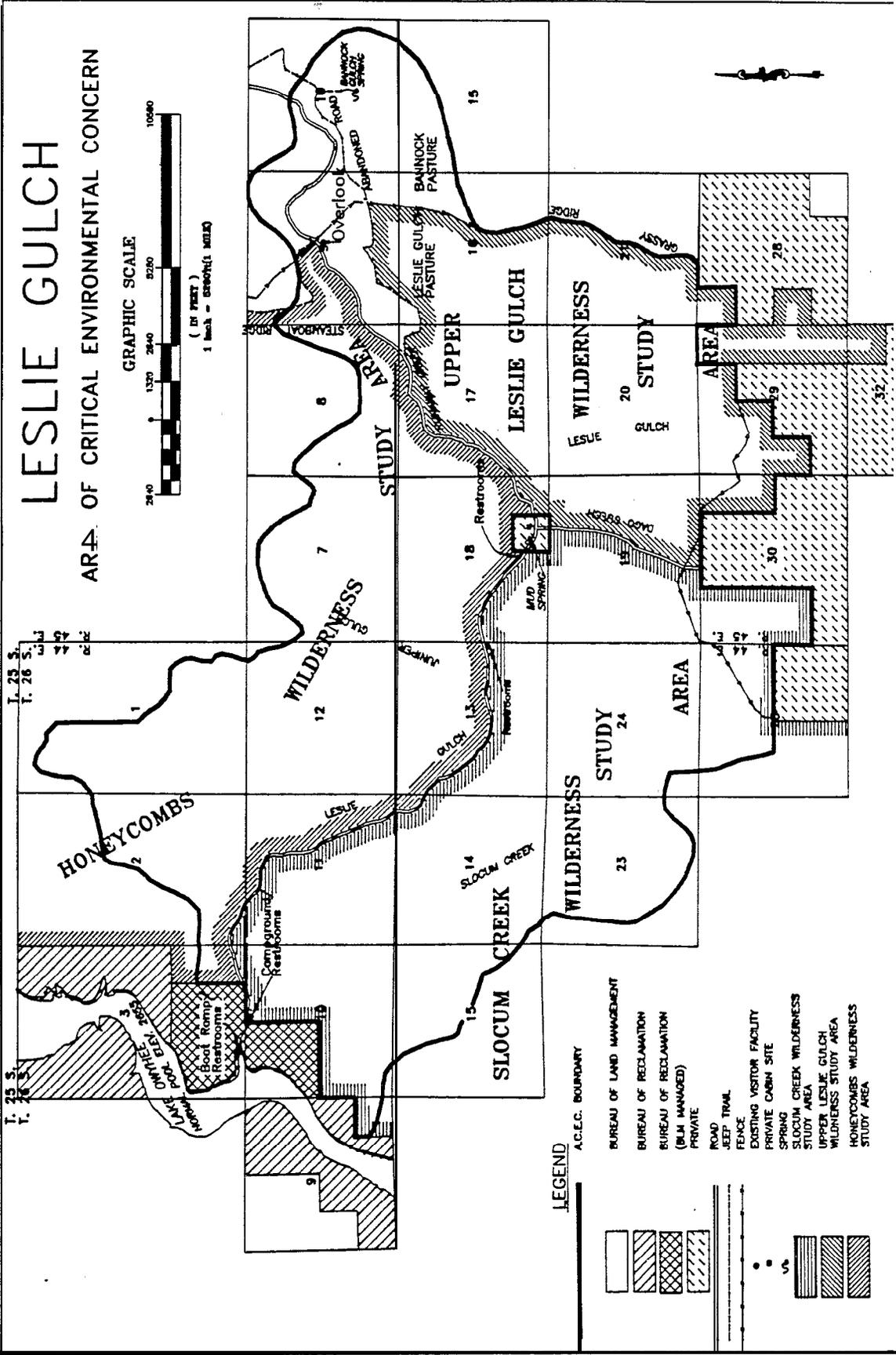
Historically, most recreational horse use has been by big game hunters. Hunters with horses travel along the Owyhee River canyon when the reservoir level is low, taking them outside of the ACEC.

Hikers and equestrians have expressed interest in development of a nonmotorized Owyhee Breaks Trail along the east side of the Owyhee Reservoir. This point-to-point corridor trail would extend from near the state park at the north end of the reservoir to Leslie Gulch and further south. Such a trail route would aid recreationists in navigating through an extensive region of public lands located in the Honeycombs and Wild Horse Basin Wilderness Study Areas. Leslie Gulch would be a likely location for providing trailhead amenities since the road provides access through the canyon.

Sport rock climbing has increased since 1990. Before then, only one climbing route was known in the area. Current climbing routes are within existing wilderness study areas, notably in or near the upper Leslie Gulch canyon. "Einstein" is the most developed climbing site with 14 summit anchor points and a combination of 26 climbing routes each with permanent (fixed) anchors. The site is on a vertical to overhanging rock face accessed by a 0.25 mile hike up upper Leslie Gulch canyon. A second popular climbing site is "Asylum", which is located on a rock wall at the junction of Runaway Creek and upper Leslie Gulch. This climbing **site** has 7 climbing routes, each with fixed anchors.

LESLIE GULCH

AREA OF CRITICAL ENVIRONMENTAL CONCERN



- LEGEND**
- A.C.E.C. BOUNDARY
 - ▭ BUREAU OF LAND MANAGEMENT
 - ▨ BUREAU OF RECLAMATION
 - ▩ BUREAU OF RECLAMATION (BLM MANAGED)
 - ▧ PRIVATE
 - ROAD
 - JEET TRAIL
 - FENCE
 - EXISTING VISITOR FACILITY
 - PRIVATE CABIN SITE
 - SPRING
 - ▨ SLOCUM CREEK WILDERNESS STUDY AREA
 - ▩ UPPER LESLIE GULCH WILDERNESS STUDY AREA
 - ▧ HONEYCOMBS WILDERNESS STUDY AREA

The ACEC is within a designated “limited” off-highway vehicle (OHV) use area. This designation restricts the use of all motorized vehicles yearlong on BLM public lands to three existing routes: the Runaway Creek/Leslie Gulch main road, Dago Gulch Road, and the route on Steamboat Ridge.

While vehicle-accompanied campers are encouraged to limit their activities to the Slocum Creek campground, there are no specific restrictions related to camping activity within the ACEC. Occasionally vehicle camp sites are established off the main roads in the ACEC, particularly in Dago Canyon and along the main Leslie Gulch Road. The Dago Gulch/Leslie Gulch junction area is also a preferred vehicle camping and parking area, some on the private 40-acre parcel and some on adjacent public land. Dispersed vehicle camping activities has resulted in increased damage and destruction of woody vegetation for use in campfires, and impacts on vegetation, soil, and on some special status plant habitats neighboring the Leslie Gulch Road.

Wilderness

Approximately 85 percent of the ACEC has been designated as wilderness study areas (WSAs). Included is all of the 3,000-acre Upper Leslie Gulch WSA (OR-3-74), about 55 percent of the 7,600-acre Slocum Creek WSA (OR-3-75), and about 8 percent of the 39,000-acre Honeycombs WSA (OR-3-77A).

Wilderness values identified within the three WSAs are outstanding opportunities for solitude and primitive and unconfined recreation, a high degree of naturalness and a number of special wilderness features.

Special wilderness features within the ACEC include their spectacular scenery, the presence of several species of special status plants, bighorn sheep, winter habitat for northern bald eagles, Rocky Mountain elk, a disjunct stand of ponderosa pine and an outstanding population of curl-leaf mountain mahogany.

Wildlife

Mule deer, Rocky Mountain elk and California bighorn sheep are found in the upland habitats of the ACEC and lands adjacent to the ACEC. Mule deer also utilize Runaway Gulch during the early winter and lower Leslie Gulch in the late winter and early spring. Elk use varies with the severity of the winter. Upland game birds such as chukar partridge and California quail occupy much of the area. The rugged canyons

also provide habitat for coyote, bobcat, hawks, lizards, and a variety of non-game migratory birds. Raptors, northern flickers, and white-throated swifts use the numerous cliff crevices, which also provide potential habitat for bats.

Special Status animal species in the ACEC other than California bighorn sheep include bald eagles (*Haliaeetus leucocephalus*), listed as threatened under the Endangered Species Act, which winter along the Owyhee River corridor. Mountain quail (*Oreortyx pictus*), a Category 2 candidate for listing, have been special status in Malheur County for many years. The last recorded observation in the county was in the ACEC in 1981. Alcoves and crevices in the cliff walls provide potential roosting habitat for Townsend’s big-eared bat (*Plecotus townsendii*), a Category 2 candidate for listing. Reptile species found in the area include the Mojave black-collared lizard (*Crotaphytus bicinctores*), a Bureau Sensitive species, and the western ground snake (*Sonora semiannulata*), a Bureau tracking species. The white-tailed antelope squirrel (*Ammospermophilus leucurus*) is another Bureau tracking species that has been observed in the ACEC.

Wild Horses

Approximately 7,700 acres (10 percent) of the Three Fingers Wild Horse Herd Management Area (HMA) are within the Leslie Gulch ACEC. Wild or feral horses have used the HMA since the late 1800s. Accounts from the early 1900s estimated over 5,000 feral horses inhabited the general area from Cow Creek on the south, to Adrian on the north, the Owyhee River on the west, and the Idaho state line on the east. Today there are between 75 and 150 wild horses within the 76,933 acre HMA, but wild horses use of Leslie Gulch is currently infrequent.

Other Botanical Resources

Contributing to the biological diversity of the ACEC is a significant site which supports a notable example of an unusual botanical community for this region.

A small disjunct population of ponderosa pine (*Pinus ponderosa*) is found at the southern boundary of the ACEC. The stand occurs on the crest of a rhyolitic ridge approximately 70 miles from the nearest ponderosa pine forests. Nearly 100 trees varying in age from seedlings to two trees over 200 years old have been identified. There is no evidence indicating that this is a relict population, and origins from the west or northwest have been advanced. Because of its inaccessibility, the stand shows little to no sign of visitation by livestock or humans.

DESCRIPTION OF ALTERNATIVES

Resource Topic	Alternative A	Alternative B (No Action)	Alternative C	Alternative D (Preferred)
Access/Roads	<ul style="list-style-type: none"> ●All existing maintenance in Alternative B, plus: ●2 additional pullout/parking areas. *Road maintenance minimized at special status plant sites. ●Steamboat Ridge route closed, Dago Gulch closed with gate. *Public easement or acquisition up Dago Gulch. 	<ul style="list-style-type: none"> *Drainage crossings not improved. ●Road maintenance on as needed basis. ● Existing road and culvert maintenance. ●Steamboat Ridge route would remain open on public land. 	<ul style="list-style-type: none"> ●All measures in Alt. A except: ●4 pullout/parking areas. ●More extensive road work on drainage crossings. *Steamboat Ridge route would remain open; Dago Gulch closed with gate. 	<ul style="list-style-type: none"> ●Up to 4 additional pullout/parking areas. *Road maintenance minimized at special status plant sites, otherwise as needed. ● Roadside seeding with native plants permissible. ●Steamboat Ridge route open; Dago Gulch closed with gate. ● Public easement or acquisition up Dago Gulch.
Land Tenure	<ul style="list-style-type: none"> ●Pursue acquisition Of 40 acre private parcel or public and scenic easements. ●No water development if private parcel acquired. 	<ul style="list-style-type: none"> *Public ownership, public and scenic easements would not be pursued 	<ul style="list-style-type: none"> ●All measures in Alternative A, except some water piped to Slocum Creek campground if private parcel acquired. 	<ul style="list-style-type: none"> ●Pursue acquisition of 40 acre parcel, life estate or public and scenic easements. ●No water development if private parcel acquired.
Minerals	<ul style="list-style-type: none"> ●Areas not recommended for wilderness withdrawn from locatable mineral development. ●No saleable mineral development in the ACRC. ●No surface occupancy for mineral leasing. 	<ul style="list-style-type: none"> ●Locatable minerals withdraw, throughout ACRC. ●No saleable mineral development in the ACRC. ●No surface occupancy for mineral leasing. 	<ul style="list-style-type: none"> ●Locatable minerals not withdrawn. ●No saleable mineral development in the ACRC. ●No surface occupancy for mineral leasing. 	<ul style="list-style-type: none"> *Locatable minerals withdrawn throughout ACRC. ●No saleable mineral development in the ACRC. ●No surface occupancy for mineral leasing.
Livestock Grazing	<ul style="list-style-type: none"> ●No grazing in Leslie Gulch pasture. ●AUMs moved to other pastures in Three Fingers ● 110cment. ●Fence moved to include ● ntrial ACRC in Leslie Gulch pasture. ●Drift fence built at ACRC boundary if needed. 	<ul style="list-style-type: none"> ●Leslie Gulch pasture grazed with 132 cattle in March and April (264 AUMs). ●Other pastures not affected. ●Cattle trailed in on main access road and trailed out upper Leslie Gulch. 	<ul style="list-style-type: none"> *Leslie Gulch pasture grazed with 88 cattle December through February (264 AUMs). ●Other pastures not affected. ●Cattle trailed in cm abandoned protions of Runaway Gulch road to avoid special status plant site. 	<ul style="list-style-type: none"> ●No grazing in Leslie Gulch pasture. ●AUMs moved to other pastures in Three Fingers allotment. *Drift fence built at ACRC boundary if needed.
Noxious Weeds	<ul style="list-style-type: none"> ●Manual weed control only. ●Clean road maintenance equipment before entering ACRC. 	<ul style="list-style-type: none"> ● existing combination of manual and chemical weed control. 	<ul style="list-style-type: none"> ●Existing combination of manual and chemical weed control. ●Need free hay required for horses. 	<ul style="list-style-type: none"> *Existing combination Of manual and chemical weed control. *Chemical control on site specific basis to eliminate potential impacts to special status plants. *Clean road maintenance equipment before entering ACRC.
Wild Horses	<ul style="list-style-type: none"> ●Leslie Gulch removed from Horse Management Area. 	<ul style="list-style-type: none"> ●Existing Horse Management Area retained. 	<ul style="list-style-type: none"> *Existing Horse Management Area retained. 	<ul style="list-style-type: none"> ●Leslie Gulch removed from Horse Management Area.
Special Status Plants	<ul style="list-style-type: none"> ●Trail rerouted in Slocum Creek to avoid rare plant sites. ●Other trails around plant sites developed if needed. ●Pole fence constructed near Slocum Creek campground if needed. ●0.8 mile of Dago Gulch closed by locked gate. 	<ul style="list-style-type: none"> ●No changes in current level of protection. Existing limited OHV designation retained. 	<ul style="list-style-type: none"> ●All measures in Alternative A. ● Exlosure constructed around special status plant site near Overlook. 	<ul style="list-style-type: none"> ●Site-specific trail segments, fences, signs installed if needed. ●0.8 mile of Dago Gulch closed by locked gate. ●Special status plants may be introduced into suitable habitat.

DESCRIPTION OF ALTERNATIVES

Resource Topic	Alternative A	Alternative B (No Action)	Alternative C	Alternative D (Preferred)
Wildlife	<ul style="list-style-type: none"> • Bighorn sheep transplant operations based at Slocum Creek campground or BOR lands. • Placement of wormer blocks or other supplements reviewed. 	<ul style="list-style-type: none"> • No limits on bighorn sheep transplant base operations. 	<ul style="list-style-type: none"> • No limits on bighorn sheep transplant operations. 	<ul style="list-style-type: none"> • Bighorn sheep transplant operations based at Slocum Creek campground or BOR lands. Other sites evaluated it proposed by ODFW. • Placement of wormer blocks or other supplements reviewed.
Fire	<ul style="list-style-type: none"> • No earth moving equipment in cultural or special status plant sites in ACEC. • IMP provisions apply to WSAs. • Wilderness Management Policy followed if designated Wilderness. • Outside WSAs/Wilderness no earth moving equipment unless extreme fire conditions occur. • Fire suppression impacts on ACEC would be monitored. 	<ul style="list-style-type: none"> • All measures as in Alternative A. 	<ul style="list-style-type: none"> • All measures as in Alternative A. 	<ul style="list-style-type: none"> • All measures as in Alternative A plus: • Prescribed fire would be considered to enhance ACEC or wilderness values.

**SUMMARY OF MANAGEMENT ALTERNATIVES BY RESOURCE TOPIC
RECREATION**

Recreation Topic	Alternative A	Alternative B	Alternative C
Rock Climbing	<ul style="list-style-type: none"> • No fixed anchors, artificial handholds, or power tools. • Chalk use discouraged. 	<ul style="list-style-type: none"> • All*w existing fixed anchors, artificial handholds only at Einstein. No power tools. Mitigated chalk use. 	<ul style="list-style-type: none"> • Climbing allowed with BLM approval. Limited power tool use. No new routes or artificial handholds. Mitigated chalk
Dispersed Recreation	<ul style="list-style-type: none"> • Day use only outside developed campground. • No ground/campfires outside developed campgrounds. No use of area vegetation. • Administrative horse use only. • Trails developed if needed. 	<ul style="list-style-type: none"> • Camping and ground fires allowed throughout. • Ground fires allowed. • Worm use allowed. • Site-specific trails would be constructed. 	<ul style="list-style-type: none"> • Camping allowed except within 0.5 mile of roads. • No ground fires. • Worm use allowed on roads and ridges; group size limited. Weed free hay required. • Trails developed if needed.
Special Use Permits	<ul style="list-style-type: none"> • Permitted group size limited to 6 persons maximum. • Backcountry access permit system implemented if needed. • No vegetation/rock gathering permits. 	<ul style="list-style-type: none"> • Permits issued on case-by-case basis. • Visitor access restricted. 	<ul style="list-style-type: none"> • Permits issued on case-by-case basis. • Backcountry access permit system implemented if needed.
Off Highway Vehicle (OHV) Use	<ul style="list-style-type: none"> • Limited to designated roads. • Steamboat Ridge vehicle route closed. • Dago Gulch road partially closed. 	<ul style="list-style-type: none"> • Limited to existing designated routes. 	<ul style="list-style-type: none"> *Limited to existing designated routes.
Special Designations	<ul style="list-style-type: none"> • Back Country Byway and Watchable Wildlife designations removed. Other designations would remain. 	<ul style="list-style-type: none"> • WSA, SRMA, RNA, Back Country Byway, and Watchable Wildlife designations would remain. 	<ul style="list-style-type: none"> • WSA, SRMA, RNA, Back Country Byway, and Watchable Wildlife designations would remain.
Developed Recreation Facilities	<ul style="list-style-type: none"> • Existing facilities would remain except relocation of on. restroom to Dago Gulch or upper Leslie Gulch. • 10 campsite, provided at Slocum Creek campground. • Day use parking area at Dago Gulch if private land acquired or upper Leslie Gulch if private land not acquired. • No additional potable water. 	<ul style="list-style-type: none"> • All existing facilities would remain. • Additional camp units developed at Slocum Creek campground. • No restriction on vehicle camping outside WAS. • No additional parking areas. • No additional potable water. 	<ul style="list-style-type: none"> • Slocum Creek campground expanded to 15-20 camp units. Potable water and parking developed. • Day use parking with restrooms and equestrian camp site at Dago Gulch. • Day use parking at upper Leslie Gulch. • Added parking, dock, and waste facility at boat launch. • Day use picnic area with foot trail near boat-launch. • Day use picnic area at Juniper Gulch.

Major Management Issues

Activities Affecting Special Status Plants

Grazing

Livestock grazing may impact the Relevant and Important Value of special status plants through trampling, by introducing noxious weed seeds, and to a lesser extent by consuming the plants. Many of the known plant sites are situated on the lower slopes where cattle usually graze. Some plant sites have well developed trails through them which preclude plant growth due to continuing disturbance and soil compaction.

The 264 AUMs of grazing provided by the Leslie Gulch pasture provides income for the grazing permittees and helps support the customary life style of the local ranching community.

The special status plant populations have survived historic grazing pressures which were heavier than today. It is unknown if historic grazing has caused a reduction in the range of these species. Localized extinctions or population reductions may have occurred on suitable habitat which has been subject to grazing.

Recreation

People may impact the special status plants by trampling them or their habitat. Several of the plant sites are near preferred hiking routes, the main Leslie Gulch Road and the existing Slocum Creek campground. Factors affecting impacts by visitors include the levels and types of recreation and the location of recreational activities relative to the locations of the plant habitat. Promoting visitation to Leslie Gulch or improving recreational facilities to an excessive level could attract too many visitors to the area. Inadequately managed increased visitor use in the area may cause unacceptable impacts to the Relevant and Important Values of the ACEC.

Road Maintenance

At three locations, the Leslie Gulch Road passes through habitat supporting special status plants. The road is maintained on an annual basis, with additional maintenance necessary following sporadic flood events. Maintenance activities disturb special status plant habitat, affect seed dissemination, and uproots individual plants. Disturbance to the roadsides also provides habitat for noxious weed invasion.

Grazing Impacts To Recreation

Some recreationists object to seeing cattle or their sign, and many have expressed the opinion that cattle should not be in or around developed recreational facilities such as campgrounds.

Acquisition Of Private Inholding

The 40-acre Dago Gulch private parcel has the only reliable, accessible water source within the ACEC. There is a cabin on the property and the owner is not required to control noxious weeds. There is no legal public access across this land to Dago Gulch and there is limited control over the type of development which the owner could pursue. Some public opinion favors removing the cabin from the natural setting of Leslie Gulch. BLM is yet to determine if public interest is served best by acquiring ownership of the property or by acquisition of access and scenic easements. The water at the site is extremely important to the California bighorn sheep and is presently available for public use.

Rock Climbing

Several sport rock climbing routes within Leslie Gulch are of world class quality. All are located within the Wilderness Study Area portions of the ACEC. Climbers have created hand holds and use chalk which makes the hand holds quite visible. In addition, fixed metallic anchors to support ropes and other hardware are attached to the rock faces. Popular climbing routes can become highly visible and impact the relevant and important scenic values of the area as well as wilderness values.

Noxious Weeds

Three noxious weed species have been found in Leslie Gulch, and other far more aggressive species have been located in nearby areas. Spread of these plants represents the greatest threat to the special status plants and their habitat. Weeds can be spread through movement of domestic and wild animals, by vehicles moving through the area, by the wind, and by general recreational activities including hiking and camping.

Management Alternatives

Ten resource management topics have been identified that require management direction within the Leslie Gulch ACEC. These are the following: Access and Roads, Land Tenure, Minerals, Livestock Grazing, Noxious Weeds, Wild Horses, special status Plants, Wildlife, Wildfire, and Recreation.

In this section, four alternatives are presented for each of these resource management topics. Each alternative consists of management actions which may be implemented for that topic. Generally, the Alternative A actions are the most conservative, Alternative B is no change from current management direction, and Alternative C is the most developed approach. Alternative D is the agency preferred alternative and is generally a composite of actions selected from Alternatives A, B, and C. All management actions selected must be in accordance

with the Interim Management Policy and Guidance for Lands Under Wilderness Review (IMP) and other policy for the three WSAs.

Management Alternatives For Access And Roads

Alternative A

In addition to the existing maintenance practices detailed for the Leslie Gulch road in Alternative B, the following actions would be implemented:

- Two additional pullout/parking areas would be developed along the Leslie Gulch Road to reduce traffic congestion and to provide access to portions of the ACEC where no parking now exists. The pullout/parking areas would be located at the mouths of small drainages, one in the SW 1/4 of Section 2 and one in the SW 1/4 of Section 13.
- Road width, maintenance practices and design would be analyzed where the Leslie Gulch Road crosses identified special status plant sites to identify opportunities to reduce conflicts with the plants. Road realignment would not be considered.
- The Steamboat Ridge Road **would** be permanently closed and revegetated with native vegetation.
- A public easement into Dago Gulch would be pursued if the private land at the mouth of Dago Gulch were not acquired. A locked gate would be installed in Dago Gulch, consistent with the private right of way there, 0.8 mile north of the existing gate to control vehicle access south on the Dago Gulch Road.

Alternative B (No Action)

- Drainage crossings would not be improved beyond the existing situation. The crossings would be maintained without additional structure to pass most storm runoff events while maintaining road grade.
- Road maintenance would be done only as needed. The road is graded annually and major work is scheduled in response to flood events.
- Outside the special status plant sites, the road maintenance goals would be to retain a graded and drained road prism. Procedures to achieve this would include cleaning of the roadside ditches, backslopes, and crowning of the road surface.

- Culvert maintenance would include tail ditch construction and control of intersecting drainages in accordance with IMP guidance.
- The Steamboat Ridge vehicle Road would remain open, but would not be maintained. No new gate would be placed in Dago Gulch.

Alternative C

The measures in Alternative A would be implemented with the following exceptions:

- Four additional pullout/parking areas would be constructed along the Leslie Gulch Road to reduce traffic congestion and improve recreational access. In addition to the two pullout/parking areas described under Alternative A, pullout/parking areas would be located at the mouth of upper Leslie Gulch and at the mouth of Timber Gulch (NW 1/4 Section 14).
- More extensive road work would be allowed on the drainage crossings of the Leslie Gulch Road. This work could include drop structures located below crossings to control headcutting, or short sections of paving of the crossings themselves.
- The Steamboat Ridge Road would remain open, but would not be maintained. The Dago Gulch road would be partially closed.

Alternative D (Preferred Alternative)

- As many as four additional pullout parking areas would be constructed should monitoring indicate a need to prevent unacceptable resource damage in areas of concentrated use.
- Road width, maintenance practices and design would be analyzed where the Leslie Gulch Road crosses special status plant habitat to identify opportunities to reduce conflicts with the plants. Road realignment in non-WSA locations could be considered for enhancing special status plant habitat. Any road work proposed would consider the scenic and wilderness values contained within the ACEC and must meet IMP guidance.
- A public easement into Dago Gulch would be pursued if the private land at the mouth of Dago Gulch were not acquired. A locked gate would be installed in Dago Gulch 0.8 miles north of the existing gate to control vehicle access south on the Dago Gulch Road.

- Road maintenance on the Leslie Gulch Road would generally be done only as needed. The road would be graded annually, and major work would be scheduled in response to flood events. Roadside seeding with native plant species would be considered to reduce weed invasion.
- Outside the special status plant sites, the road maintenance goals would be to retain a graded and drained road prism. Procedures to achieve this standard would include cleaning of the roadside ditches, backslopes, and crowning of the road surface.
- Drainage crossings along the Leslie Gulch Road would have drop structures constructed as necessary to retain existing road grade. Any construction activity would be completed in accordance with IMP guidance.
- Road culvert maintenance would follow standard practices and would include tail ditch maintenance and control of intersecting drainages in accordance with IMP guidance.
- The Steamboat Ridge Road would remain open and would not be maintained. WSA boundary signs and increased monitoring would be used to discourage vehicular traffic into Honeycombs WSA.

Management Alternatives for Land Tenure

Alternative A

- Acquisition of the **40-acre** private parcel at the junction of Leslie and Dago gulches would be pursued. A public easement to Dago Gulch and a scenic easement would be optionally pursued.
- Should public acquisition of the land occur, the property would be reclaimed to a natural state by removal of all developments and revegetation with native species. Wildlife water would remain at the spring site. No potable water would be made available for public consumption.

Alternative B (No Action)

- Public ownership, public access or scenic easements would not be pursued on the **40-acre** Dago Gulch property. There would continue to be no potable water available on public land.

Alternative C

- The actions described under Alternative A would be pursued, with the following exception: Should the parcel be acquired for public ownership, a portion of the water at Mud Spring would be piped to the Slocum Creek Campground and be treated for public consumption. The pipeline would be buried in the access road. **Other** options may be considered to supply water to the campground.
 - Adequate water would be made available for wildlife at the spring site.

Alternative D (Preferred Alternative)

- Acquisition of the 40-acre private parcel at the junction of Leslie and Dago gulches would be pursued, assuming a willing seller. If acquisition is not possible, then a life estate that would transfer ownership to the public would be pursued. A public easement to Dago Gulch would be pursued if necessary. A scenic easement would be negotiated as a final option. This acquisition or easement would require an amendment to the Northern Malheur Management Framework Plan.
 - Should public acquisition of the land occur, the property would be reclaimed to a natural state by removal of all developments and revegetation with native species. Wildlife water would remain at the spring site. No potable water would be made available for public consumption.

Management Alternatives for Minerals

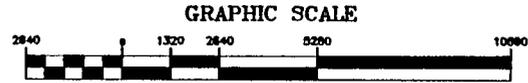
Alternative A

- Mineral withdrawal would be pursued for those portions of the ACEC which were not recommended for wilderness designation in the BLM wilderness study process. This is approximately 1035 acres. This action would require an amendment to the Northern Malheur Management Framework Plan, but would not require Congressional review.
- The entire ACEC would remain closed to salable mineral development.
- Mineral leasing would be restricted to no surface occupancy.

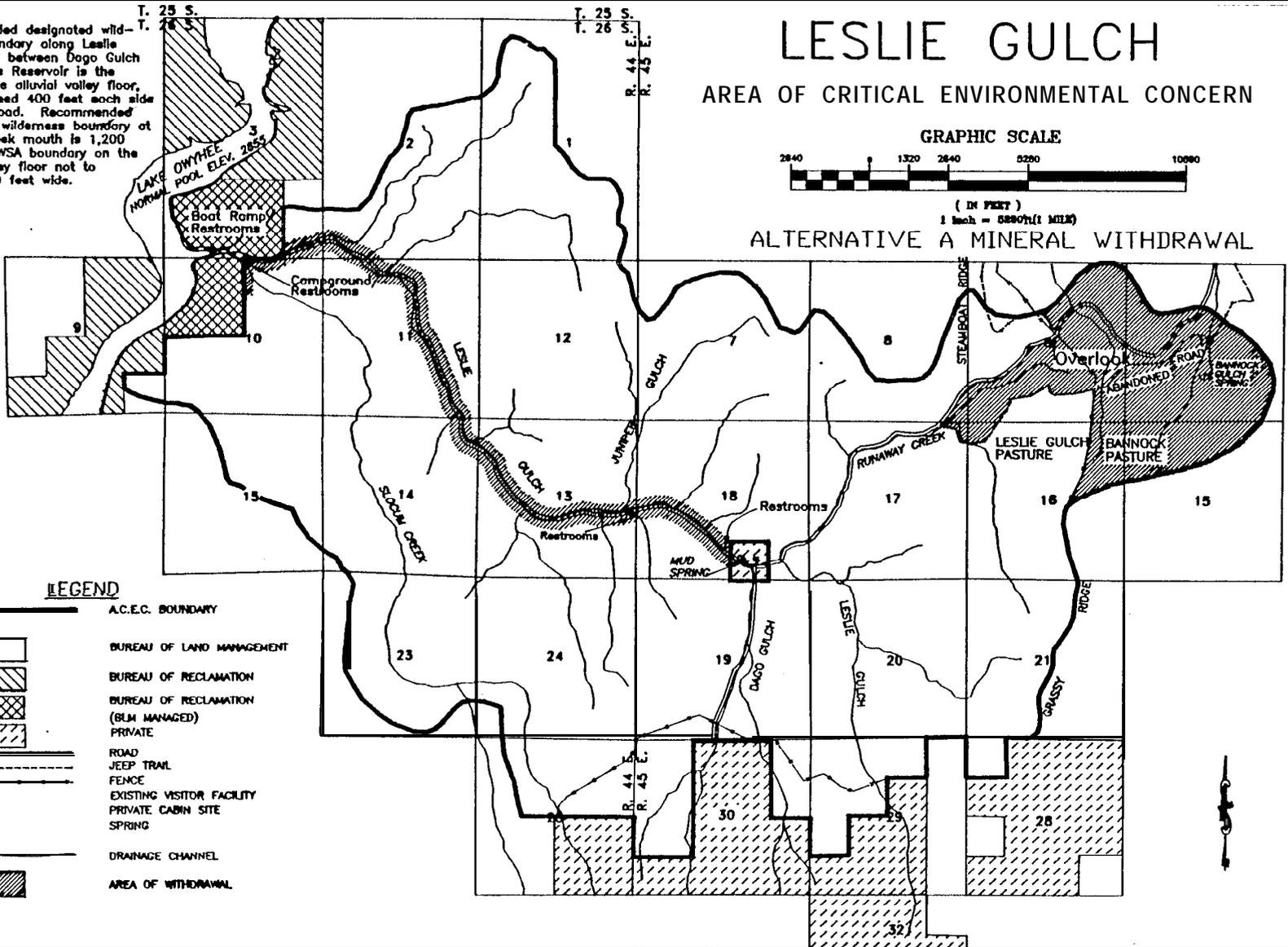
NOTE:
 Recommended designated wilderness boundary along Leslie Gulch Road between Dago Gulch and Owyhee Reservoir is the width of the alluvial valley floor, not to exceed 400 feet each side from the road. Recommended designated wilderness boundary at Slocum Creek mouth is 1,200 feet from WSA boundary on the alluvial valley floor not to exceed 300 feet wide.

LESLIE GULCH

AREA OF CRITICAL ENVIRONMENTAL CONCERN



ALTERNATIVE A MINERAL WITHDRAWAL



LEGEND

- A.C.E.C. BOUNDARY
- BUREAU OF LAND MANAGEMENT
- ▨ BUREAU OF RECLAMATION
- ▩ BUREAU OF RECLAMATION (BLM MANAGED)
- ▧ PRIVATE
- ROAD
- - - JEEP TRAIL
- FENCE
- EXISTING VISITOR FACILITY
- PRIVATE CABIN SITE
- SPRING
- DRAINAGE CHANNEL
- ▨ AREA OF WITHDRAWAL

Alternative B (No Action)

- Locatable mineral withdrawal would be pursued for the entire ACEC as recommended in the Northern Malheur Management Framework Plan. Because the area to be withdrawn is larger than 5000 acres, the mineral withdrawal would require Congressional notice and would be subject to veto by either house of Congress.
- The entire ACEC would remain closed to salable mineral development.
- Mineral leasing would be restricted to no surface occupancy.

Alternative C

- The ACEC would not be withdrawn from locatable mineral activity or mineral material sales. Mining claims could be located and developed in accordance with the Mining Law of 1872 and would follow IMP guidance within the **WSAs**. This action would require an amendment to the Northern Malheur Management Framework Plan. Any areas Congressionally designated as wilderness would likely be withdrawn from all mineral development activity as part of the wilderness designation process.
- The entire ACEC would remain closed to salable mineral development.
- Mineral leasing would be restricted to no surface occupancy.

Alternative D (Preferred Alternative)

- A locatable mineral withdrawal would be pursued for the entire ACEC as called for in the Northern Malheur Management Framework Plan. Because the area to be withdrawn is larger than 5,000 acres, a mineral withdrawal would require Congressional notice and would be subject to veto by either house of Congress.
- The entire ACEC would remain closed to salable mineral development.
- Mineral leasing would be restricted to no surface occupancy.

Management Alternatives for Livestock Grazing

Alternative A

- The Leslie Gulch pasture of the Three Fingers temporary allotment would have livestock removed. This is the pasture within the ACEC in which the conflicts between livestock and other resources, especially sensitive plants, have been identified. The livestock use would be moved to three other pastures (Saddle Butte, Bannock, and Sulphur Springs Seeding) within the Three Fingers temporary allotment. Current **monitoring** data indicate there is sufficient forage to **accommodate** the increased use in these pastures. A reduction in active grazing preference may be made in the future if monitoring indicates the increased use is not sustainable. This removal would require an amendment to the Northern Malheur MFP.
- The fence between the Leslie Gulch and Bannock pastures within the ACEC would be relocated so that the entire ACEC is within the Leslie Gulch Pasture. The fence would be along the eastern **boundary** of the ACEC, and would require construction of 3 miles of fence and removal of 2 miles of fence.
- Depending upon monitoring, up to two miles of drift fence may be necessary to keep cattle from drifting into Leslie Gulch from the adjacent Riverside and Bannock pastures. Any fence would be located so as to minimize impacts to wilderness and scenic values.

This alternative would require an amendment to the Northern Malheur Management Framework Plan.

Alternative B (No Action)

- Grazing the Leslie Gulch Pasture with 132 cattle during March and April (264 AUMs) each year would continue.
- The Saddle Butte, Bannock and Sulfur Springs Seeding pastures would remain grazed from May 1 to October 31 in a deferred rotational grazing system.
- As is currently done, cattle would be trailed into the Leslie Gulch pasture on the Leslie Gulch Road and trailed out of the pasture through upper Leslie Gulch.

Alternative C

- Grazing would continue in the Leslie Gulch Pasture with the season of grazing changed to December through February with 88 head of cattle. This would harvest the same number of AUMs (264) as is currently used.

Livestock would be trailed into the pasture over the abandoned portions of the Runaway Gulch Road to avoid a special status plant site.

Alternative D (Preferred Alternative)

- The Leslie Gulch pasture of the Three Fingers temporary allotment would have livestock removed. This is the pasture within the ACEC in which the conflicts between livestock and other resources, especially sensitive plants, have been identified. The livestock use would be moved to three other pastures (Saddle Butte, Bannock, and Sulphur Springs Seeding) within the Three Fingers temporary allotment. Current monitoring data indicate there is sufficient forage to accommodate the increased use in these pastures. A reduction in active grazing preference may be made in the future if monitoring indicates the increased use is not sustainable. This removal would require an amendment to the Northern Malheur Management Framework Plan.

- Based upon forage production data 304 At JMs above demand are available in the Bannock, Saddle Butte and Sulphur Springs Seeding pastures. Forage production data has been calculated from actual use-utilization data according to procedures outlined in the Southern Malheur Grazing Environmental Impact Study and Rangeland Program Summary completed in 1984.
- Three alternatives have been considered for utilizing the AUMs in other pastures within the allotment. One alternative considered but found to be not viable would be to make the same amount of use (132 cattle 3/1 to 5/1) in the Riverside pasture. This pasture is currently used at the same time period in the allotment as the Leslie Gulch pasture. The Riverside pasture is a large percentage of wilderness study area. It also contains wildhorse herd management area, big horn sheep habitat, big game winter range and the Honeycombs ACEC. An increase in grazing use in this pasture, besides possibly impacting some of these resources, may not be compatible with the Interim Management Policy for Lands Under Wilderness Review.

- Two alternatives have been considered in detail and discussed with the permittees to make the 264 AUMs of use in the Saddle Butte, Bannock and Sulphur Springs pastures:

(1) The AUMs could be utilized at the end of each permittee's current licensed use. This would represent for Allison 180 cattle 10/1 to 10/22 and for Greelev 162 cattle 9/2 to 9/25.

(2) The permittees could reduce their numbers later than in the middle of June as is presently done. This would represent 53 cattle 6/16 to 9/1 for Allison and 61 cattle 6/16 to 8/21 for Greelev.

- Depending upon monitoring, up to two miles of drift fence may be necessary, as a last resort, to keep cattle from drifting into Leslie Gulch from the adjacent Riverside and Bannock pastures. Any fence would be located so as to minimize impacts to wilderness and scenic values and be designed to allow big game passage. Other options, such as range riding, may be employed to minimize impacts within a WSA and may make any drift fences unnecessary.

Management Alternatives for Noxious Weeds

Alternative A

- All weed control in Leslie Gulch would be done manually to reduce the chances of inadvertent spraying of the special status plants.
- Horse use would not be allowed within the ACEC except for administrative purposes. This would reduce the chances of spreading weed seeds into isolated portions of the ACEC.
- Road maintenance equipment would be cleaned with high pressure water prior to being used in the ACEC to reduce the potential for introduction of weed seeds.

Alternative B (No Action)

- The existing combination of manual and chemical control methods would continue to be utilized.
- Unlimited recreational horse use would continue.

Alternative C

- In addition to continuing the existing combination of manual and chemical weed control methods,

weed-free hay would be required of anyone using horses within the ACEC.

- Road maintenance equipment would be cleaned prior to moving into the ACEC to reduce the potential for introduction of weed seeds.

Alternative D (Preferred Alternative)

- The existing combination of manual and chemical weed control methods would continue. All chemical control actions would be done on a site specific basis and would be monitored on-site by a botanist to eliminate chances for impacts to special status plant species. Manual control methods would be used where they would be effective. If chemical control is necessary, application would be according to the Vale District Five Year integrated Weed Control Plan and EA. Chemical application would use methods that would apply chemical targeted to individual plants.
- Road maintenance equipment would be cleaned prior to moving into the ACEC to reduce the potential for introduction of weed seeds.
- Horse use would not be allowed within the ACEC except for administrative purposes. This would reduce the chances of spreading weed seeds into isolated portions of the ACEC.

Management Alternatives for Wild Horses

Alternative A

- Leslie Gulch ACEC would be removed from the Herd Management Area. Any wild horses that move into the ACEC would be gathered and removed. This action would require an amendment to the Northern Malheur Management Framework Plan.

Alternative B (No Action)

- The existing wild horse management plan **would** continue, with wild horses allowed to use the Leslie Gulch ACEC as part of their range.

Alternative C

- The existing wild horse management plan would continue, with wild horses allowed to use the Leslie Gulch ACEC as part of their range.

Alternative D (Preferred Alternative)

- Leslie Gulch ACEC would be removed from the Herd Management Area. Any wild horses that move into the ACEC would be either moved back into the HMA or gathered and removed. This action would require an amendment to the Northern Malheur Management Framework Plan.

Management Alternatives for Special Status Plants

Alternative A

- Site-specific trail segments would be developed **in** Slocum Creek to avoid special status plant sites. Other trails would be developed around identified plant sites if monitoring indicates a need to prevent damage to plants and habitat.
- A pole fence would be constructed at the plant site adjacent to the Slocum Creek campground should monitoring indicate a need.
- A locked gate would be installed in Dago Gulch 0.8 mile north of the existing gate to control vehicle access to the special status plant sites along the Dago Gulch Road. Access would be consistent with the existing private right of way in Dago Gulch.

Alternative B (No Action)

- Under current management, special status plants receive some level of protection from the off highway vehicle designation and under IMP guidance for **WSAs**.

Alternative C

- In addition to the provisions of Alternative A, an **exclosure** would be constructed to protect a special status plant site near the overlook from livestock. Other **exclosures** would be constructed around special status plant sites if monitoring indicates a need.

Alternative D (Preferred Alternative)

- Site-specific trail segments, fences and/or signs would be installed if monitoring indicates a need to protect special status plants or their habitat.
- A locked gate would be installed in Dago Gulch 0.8 mile north of the existing gate to control vehicle access to the special status plant sites along the

Dago Gulch Road. Access would be consistent with the existing private right of way in Dago Gulch.

- special status plants may be introduced into suitable habitat.

Management Alternatives for Wildlife

Alternative A

- Bighorn sheep transplant operations would only be based at the Slocum Creek campground or on Bureau of Reclamation lands along the Owyhee Reservoir.
- Any wormer blocks or feed supplement placements for the bighorn sheep would be reviewed to evaluate impacts to ACEC values.

Alternative B (No Action)

- Locations of areas used for bighorn sheep transplant base operations would be limited only by IMP considerations. Slocum Creek campground has been used in the past.

Alternative C

- Locations of areas used for bighorn sheep transplant base operations would be limited only by IMP considerations. Slocum Creek campground has been used in the past.

Alternative D (Preferred Alternative)

- Bighorn sheep transplant operations would be based at Slocum Creek Campground. If other sites are needed by ODFW for operations, a proposal would be submitted to BLM for evaluation of environmental impacts and approval. If BOR withdrawn lands **are** needed by ODFW, a proposal would be submitted to BOR for evaluation of environmental impacts and approval.
- Any wormer blocks or feed supplement placements for the bighorn sheep would be reviewed to evaluate impacts to ACEC values and require approval.

Management Alternatives for Fire

Alternative A

The existing Vale District Fire Management Activity Plan would continue to govern fire suppression activities within the ACEC.

- Earth-moving equipment would not be used unless a fire has flame lengths of six feet or more (extreme fire conditions) and with Area Manager approval.
- No earth-moving equipment would be utilized on any identified special status plant site or archaeologically significant area.
- IMP guidance would be followed within the Wilderness Study Area portions of the ACEC. If the areas are designated Wilderness, then Wilderness Management Policy would be followed.
- Naturally occurring fires would not be used for resource enhancement (e.g., sagebrush control) except where flame length is less than two feet.

Alternative B (No Action)

The existing Vale District Fire Management Activity Plan would continue to govern fire suppression activities throughout the Vale District.

Alternative C

The existing Vale District Fire Management Activity Plan would continue to govern fire suppression activities throughout the Vale District.

Alternative D (Preferred Alternative)

Generally, the existing Vale District Fire Management Activity Plan would continue to govern fire suppression activities within the ACEC. The following additional provisions would be added to fire management in the ACEC.

- IMP guidance would be followed within the WSA portions of the ACEC. If the areas are designated Wilderness, then Wilderness Management Policy would be followed. If Congress returns the **WSAs** to multiple use, IMP guidance would continue to be used within the ACEC..
- Prescribed or naturally occurring fire may be utilized when specific management objectives are identified to enhance ACEC or wilderness values.

Management Alternatives for Recreation

All Alternatives

The following management actions would apply under all recreation alternatives:

- The Memorandum of Understanding between the Bureau of Land Management and the Bureau of Reclamation would be retained and revised as needed.
- The lockable gate at the overlook at the head of Runaway Gulch would be retained to temporarily close the ACEC to vehicle access for public safety.
- A Sign Plan would be developed for the ACEC for the placement of safety, directional and interpretive signs. A brochure about the Leslie Gulch area would be developed which emphasizes resource values and user ethics.
- Handicapped access would be provided at selected developed facilities.
- Shooting restrictions would be enforced around developed facilities for public safety.
- There would be no organized competitive or commercial rock climbing, and no new alteration of natural hand/foot holds; temporary rock climbing hardware would not be left on walls; and BLM approval would be required for maintenance or removal of fixed anchors and other artificial constructs.

Alternative A

Rock Climbing

- Rock climbing with fixed anchors or artificially constructed hand holds would be precluded within the ACEC. Power tools would not be permitted and chalk use would be discouraged.

Dispersed Recreation

- All recreational activities would be limited to day use only. Camping and ground fires would be restricted to the Slocum Creek campground.
- Recreational horse use would not be allowed within the ACEC.
- Trails would be developed if monitoring indicates a need to protect significant resource values.

Special Use Permits

- Any activity requiring a permit would be limited to a maximum of six persons.
- Vegetation gathering permits would not be issued.
- A back country visitor access permit system would be implemented if monitoring indicated a need for the protection of resource values.

Off-Highway Vehicle (OHV) Use

- The present Limited OHV use designation would remain in effect for designated roads (Runaway Creek/Leslie Gulch and Dago Gulch). The Steamboat Ridge vehicle route would be closed. Vehicle access to Dago Gulch would be consistent with the private right-of-way and controlled with a locked gate located immediately above any day use facilities. The remainder of the ACEC would remain closed to off-road vehicle use.

Special Designations

- The Back Country Byway and Watchable Wildlife designations would be removed. The Wilderness Study Area, Special Recreation Management Area, and Research Natural Area designations would be retained.

Developed Recreation Facilities

- Existing facilities would remain unchanged, except the restroom adjacent to the private parcel would be moved to Dago Gulch if the private land there is acquired. Optionally, the restroom would be placed at upper Leslie Gulch. Day use parking would also be developed at the mouth of Dago Gulch or at the mouth of upper Leslie Gulch.
- Ten campsites would be developed at the Slocum Creek campground within the existing campground area.
- No potable water would be made available.

Alternative B (No Action)

Rock Climbing

- Existing fixed anchors and constructed hand holds would be allowed only at the Einstein climbing site in upper Leslie Gulch. Climbers would remove or mitigate existing fixed hardware and hand holds in other areas. Power tools would not be allowed, and chalk use would be mitigated. Group size and

frequency of site-specific use would be limited if monitoring indicates a need for protection of resource values.

Dispersed Recreation

- Camping and ground fires would be permitted throughout the area. Down and dead vegetation could be used for campfires.
- Horse use would be allowed throughout the area.
- Site-specific trail segments would be constructed to protect sensitive resource values, The Owyhee Breaks trail corridor would not be established.

Special Use Permits

- Special Recreation Use Permits, Land Use Permits and vegetation gathering permits would be issued on a case-by-case basis consistent with management of ACEC values and IMP guidance.
- A back country access permit system would not be established.

Off-Highway Vehicle (OHV) Use

- The present Limited OHV use designation would remain, restricting vehicle use to designated routes (Runaway/Leslie Gulch, Dago Gulch, and Steamboat Ridge only). All other areas would remain closed to off-road vehicle use.

Special Designations

- The Wilderness Study Area, Special Recreation Management Area, Research Natural Area, Back Country Byway, and Watchable Wildlife designations would be retained.

Developed Recreation Facilities

- All existing developed day use and camping facilities would remain, and additional specific camp units with tables and grills would be developed at Slocum Creek campground within the existing campground area.
- No additional pullout/parking areas or potable water would be developed.

Alternative C

Rock Climbing

- Existing fixed anchors would remain. Existing partially completed climbing routes may be completed with BLM approval, but no new climbing routes would be allowed. Measures to minimize resource impacts and public hazards would be enforced. Additions at the Einstein site would not be allowed. The use of power tools would be allowed in **WSAs** with BLM approval, but not in designated wilderness areas. Chalk use would be mitigated. Group size and frequency of the site-specific use would be limited if monitoring indicates a need to protect resource values.
- Rock climbers would be directed away from known **raptor** nests, bat roosting and bighorn sheep lambing sites.

Dispersed Recreation

- Camping would be allowed throughout the ACEC except within 0.5 mile of the Leslie Gulch Road. Backcountry campsites would be designated if monitoring indicates the need to protect resource values.
- Vegetation gathering for camp fire fuel would not be permitted. Camp fires would be limited to the grills provided at the Slocum Creek campground.
- Horse use would be allowed on roads and ridges with limits placed on group sizes. Weed-free hay would be required.
- Short, site specific trail segments would be developed if monitoring indicates a need to protect significant resource values.
- An Owyhee Breaks trailhead would be developed in conjunction with one of the vehicle pullout/parking areas. The trail would be a point-to-point type of trail with no development of treaded trail, except that needed to protect ACEC and wilderness values.

Special Use Permits

- Special Recreation Use Permits, Land Use Permits and vegetation gathering permits would be issued on a case-by-case basis consistent with ACEC values and IMP guidance.

- A back country visitor access permit system would be implemented if monitoring indicated a need to protect resource values.

Off-Highway Vehicle (OHV) Use

- The present Limited OHV vehicle use designation would remain, restricting vehicle use to existing roads (Runaway/Leslie Gulch, Dago Gulch and Steamboat Ridge). The remainder of the ACEC would remain closed to off -road vehicle use.

Special Designations

- The Wilderness Study Area, Special Recreation Management Area, Research Natural Area, Back Country Byway, and Watchable Wildlife designations would be retained.

Developed Recreation Facilities

- Should any Congressional wilderness or **non-**wilderness designation permit, Slocum Creek campground would be expanded and then developed to contain 15 to 20 designated camping units outside of any wilderness. Potable water would be available at the site, and day use parking would be constructed. Camping with horses would be permitted only at a Dago Gulch designated equestrian campsite.
- Dago Gulch would have a day use parking site, a restroom and an equestrian campsite if the private 40 acre parcel is acquired. Parking would also be provided at upper Leslie Gulch.
- The Owyhee boat launching facility would have additional parking, safety docks and a waste disposal facility for river floaters.
- Additional recreational facilities would be developed at the hill south of the Owyhee boat launch to include a day use picnic area with four to six tables/grills and a foot trail. Also, a single picnic table/grill **would** be provided at the mouth of Juniper Gulch.

Alternative D (Preferred Alternative)

Rock Climbing

- A cooperative agreement would be developed with rock climbers for implementing management actions, monitoring of use, minimizing safety hazards, minimizing resource impacts, promoting climbing ethics and development of a search and rescue plan.

- Existing fixed anchors, mitigated chalk use and existing constructed holds would be allowed only at the Einstein climbing site in upper Leslie Gulch. Climbers would remove or mitigate existing fixed hardware and artificial hand holds in other areas. Power tools would not be allowed.
- When and where fixed anchors become unsafe at the Einstein site, as determined by climbers, the route would be closed and removed by climbers in accordance with BLM authorization. Maintenance of fixed anchors and holds would not occur.
- Group size and frequency of site use would be limited or all rock climbing use eliminated if monitoring indicates a need to protect ACEC and wilderness values.

Dispersed Recreation

- All recreational activities would be limited to day use only. Camping and ground fires would be restricted to the Slocum Creek campground.
- Recreational horse use would not be allowed.
- Site-specific signs or trail segments would be developed if monitoring indicates a need to protect significant resource values.
- Higher visitor use areas may be surveyed for bighorn sheep lambing, **raptor** nesting and bat roosting. Appropriate mitigation would be implemented if impacts to these species are identified.
- An Owyhee Breaks trailhead would be developed at an established pullout/parking area. **Site-**specific treaded trail segments would be established only to protect important ACEC or wilderness values.

Special Use Permits

- Any activity requiring a permit would normally be limited to a maximum of six persons. Specific exceptions may be allowed where the use is compatible with ACEC and wilderness values.
- Vegetation or mineral material permits would be issued only for scientific or educational purposes.
- A back country visitor access permit system would be implemented if monitoring indicated a need for the protection of resource values.

Off-Highway Vehicle (OHV) Use

- The present Limited OHV use designation would limit vehicular traffic to the Leslie Gulch and Steamboat Ridge roads. Vehicle access to Dago Gulch would be consistent with the existing private right-of-way and controlled with a locked gate located on public lands .8 mile north of the existing gate. The remainder of the ACEC would remain closed to off-highway vehicle use.

Special Designations

- The Back Country Byway and Watchable Wildlife designations would be removed. The Wilderness Study Area, Special Recreation Management Area, and Research Natural Area designations would be retained.

Developed Recreation Facilities

- Existing facilities would remain unchanged in the ACEC, except the restroom adjacent to the private parcel would be moved to Dago Gulch and a day use parking area developed if the private land or easement is acquired by the BLM. Optionally, a restroom and pullout/parking area may be placed at upper Leslie Gulch.
- Campsites with tables and grills would be developed at the Slocum Creek campground within the existing campground area.
- No developed potable water would be available within the ACEC.
- The boat launching facility would have additional parking, up to three picnic sites, a safety dock, a fish cleaning station, and a waste disposal facility provided for floaters of the Owyhee Wild and Scenic River.
- Temporary overnight facilities may be provided at the Slocum Creek-Campground for a BLM visitor contact or resource protection employee.

Management Alternatives Considered But Not Analyzed in Detail

- Total closure of Leslie Gulch by locking the gate near the Overlook and allowing access only by permit **could** reduce many of the identified resource conflicts. This alternative is not considered further since actions proposed in the

alternatives analyzed would provide adequate protection for the Relevant and Important Values of the ACEC.

- Either suspension of active grazing preference for several years or a long-term suspension was considered. These alternatives are not analyzed at this time because current monitoring data indicate there is sufficient forage to **accommodate** displaced **AUMs** in adjacent pastures within the same allotment.
- Livestock impacts to special status plant sites could be controlled by fencing all of the identified plant sites. This alternative would require a large amount of fence and would not comply with IMP guidance or visual resource management.
- The alternative to increase livestock grazing in the Leslie Gulch pasture from the current 264 AUMs to the 948 AUM carrying capacity was considered but is not analyzed in detail. Increased livestock grazing would not be compatible with the Relevant and Important Values identified within the ACEC.
- The potential for public acquisition of private lands along the south boundary of the ACEC was considered but not analyzed in detail. These lands are outside the exterior boundary of the ACEC. This issue is more appropriately addressed when the Resource Management Plan is prepared for BLM lands in Malheur County starting in 1995.
- Improving the quality of the access road with measures such as paving the road was considered but not analyzed in detail. These measures would **result** in increased recreational use and not be compatible with the Relevant and Important Values identified within the ACEC.
- Complete removal of the Slocum Creek campground was considered but not analyzed in detail. Overnight facilities are necessary to manage overnight camping near the boat launch facility. Due to its remote location, camping by boat users will continue to occur in this area.

Resource Management Topics

In this section, each of the resource management topics is considered individually. A narrative describes the factors which influence management prescriptions, and an analysis is then made of the anticipated impacts of each alternative on that topic.

To enable tracking of the origin of a particular action, a topic heading is added to blocks of potential actions in each alternative. Monitoring needs for each topic are also listed in this section.

Access and Road

Factors Which Influence anagement Prescriptions

The Leslie Gulch Road has a **200-foot** wide public right-of-way which protects public access. Where the road crosses the **40-acre** private parcel at the junction of Leslie and Dago Gulches, a **100-foot** wide perpetual easement has been retained for public access.

The Leslie Gulch Road was inadvertently constructed through several sites which contain special status plants. When the present road was constructed in 1969, the significance of these plant populations unknown. Annual road maintenance and the disruption of surface water flows by the road may be impacting plants within these sites.

A private right-of-way across public land has been granted for the road in Dago Gulch. This right-of-way is a nonexclusive, nonpossessory right-of-way which provides legal access for the owner of the private lands at the head of Dago Gulch. Although this road connects physically with the Leslie Gulch Road, there is no legal public access across the priiate land at the mouth of Dago Gulch. The few hundred feet of Dago Gulch road across this private parcel could legally be closed to the public by the private landowner.

The primitive road along the top of Steamboat Ridge once provided access to a horse trap that was used for gathering wild horses. The trap has not been used for many years. This route leaves the Leslie **Gulch** Road near the overlook and crosses approximately 0.25 mile of the ACEC before following the ridge top for several miles. This is not a constructed road and has no right-of-way or easement. Current use is limited to providing recreational access for hunters during big game season. Trespass vehicle use is spreading from this route into the Honeycombs WSA. The steep grade of the road is causing some accelerated soil erosion.

Impacts Of Alternatives On Access And Roads

Alternative A

Access and Roads

- Addition of two pullout/parking areas would reduce road congestion and improve backcountry access along the Leslie Gulch Road. Road congestion would be significantly reduced at upper Leslie Gulch which now receives occasional heavy use, should parking be provided there or at Dago Gulch.
- Where the Leslie Gulch Road passes through identified special status plant sites, alternative road maintenance practices could result in a rougher, less passable road for short distances. The extent of this change would be dependent upon the specific modifications to maintenance which are implemented; however, the road would remain passable for highway vehicles.
- There would be no vehicle access to Steamboat Ridge. The accelerated soil erosion which is **occurring** along the road would decrease over time.

Land Tenure

- Acquisition of ownership or public easement of the Dago Gulch private parcel would guarantee public access to Dago Gulch.

Special Status Plants

- Should public access be acquired into Dago Gulch, the added locked gate in the gulch would remove public vehicle access to approximately 0.8 mile of road. The owner of the private right of way will retain access to the private lands at the head
o f

Recreation

- Removal of all sport rock climbing from the ACEC would reduce congestion at the upper Leslie Gulch parking area and remove the distraction that rock climbers present to drivers on the road. This would enhance the quality of sightseeing for motorists.
- The Leslie Gulch Road and developed facilities would be available to vehicle use.

Alternative B (No Action)

Access and Roads

- With no new pullout/parking areas, road congestion and back country access would not be improved under this alternative.
- The Steamboat Ridge Road would remain open to general public vehicle use; Slightly accelerated soil erosion would continue along the Steamboat Ridge road. Legal vehicle access to public lands in Dago Gulch would not be available.

Land Tenure

- The owner of the **40-acre** parcel at Dago Gulch could legally close public access to Dago Gulch. Without this legal access, the public would not have a means to visit public lands in Dago Gulch, except by hiking over excessively steep terrain or by back country access.

Special Status Plants

- Since public vehicle access to the lower 0.8 mile of the gulch would remain, there would be increased potential for impacts to special status plants along the road.

Recreation

- Eliminating rock climbing from the Asylum site would remove this distraction to motorists. The road corridor's natural setting for motorists' sightseeing would also be enhanced. There would be some occasional parking congestion and damage to vegetation at the upper Leslie Gulch trailhead area due to continued use of the Einstein site.
- Under the Limited OHV designation, there would be public vehicle access over the Leslie Gulch, Dago Gulch, Steamboat Ridge roads and all developed facilities. This designation **would** continue to preclude OHV use on all other areas of the ACEC.

Alternative C

Access and Roads

- The addition of four pullout/parking areas would improve road congestion and back country access more than the **other** alternatives.

- The more extensive improvements proposed for the drainage crossings under this alternative would improve the quality of access along the road. These improvements could also reduce the amount of road maintenance necessary at the crossings.

Land Tenure

- Acquisition of ownership or public easement of the Dago Gulch private parcel would guarantee public access to Dago Gulch.

Special Status Plants

- The added locked gate in Dago Gulch would remove public vehicle access to approximately 0.8 mile of road. The owner of the private right of way will retain access to the private lands at the head of Dago Gulch.

Recreation

- Rock climbing activity viewed by motorists driving along the Leslie Gulch Road could distract drivers and disrupt to the natural setting.
- Under the Limited OHV use designation, there would be public vehicle access over the Leslie Gulch, Dago Gulch, Steamboat Ridge roads and all developed facilities. This designation would continue to preclude OHV use on all other areas of the ACEC.

Alternative D (Preferred Alternative)

Access and Roads

- The addition of up to four pullout/parking areas would reduce driving hazards and road congestion, help disperse hiking, and provide for increased back country access.
- The Steamboat Ridge Road would remain open to general public vehicle use; slightly accelerated soil erosion would continue along the Steamboat Ridge road.
- Where the Leslie Gulch Road passes through identified special status plant sites, alternative road maintenance practices could result in a rougher, less passable road for short distances. The extent of this change would be dependent upon the specific modifications to maintenance which are implemented; however, the road would remain passable for highway vehicles. Road

realignment within WSAs would not comply with the IMP, since realignment would result in changing a WSA's boundary.

Land Tenure

- Acquisition of ownership or public easement of the Dago Gulch private parcel would guarantee public access to Dago Gulch.

Special Status Plants

- The added locked gate in Dago Gulch would remove public vehicle access to approximately 0.8 mile of road. The owner of the private right of way will retain access to the private lands at the head of Dago Gulch.

Recreation

- Sport rock climbing activity would not be viewed by motorists driving along the Leslie Gulch Road. Sightseeing of the natural setting by motorists would be enhanced.
- Under the Limited OHV use designation, there would be public vehicle access over the Leslie Gulch and Steamboat Ridge roads and all developed facilities. This designation would continue to preclude OHV use on all other areas of the ACEC.

The gate on the Dago Gulch road would eliminate unsafe turn **arounds** on the narrow road and prevent vehicle trespass in Upper Leslie and Slocum Creek WSAs in Dago Canyon.

Land Tenure

Factors Which Influence Management Prescriptions

Potential acquisition of private lands by the BLM must be consistent with the **prescribed** mission of the agency. Protection of the naturalness of the wilderness study areas and the Relevant and Important value of high quality scenery dictates analyzing characteristics of adjacent lands which might conflict with these values. The existence of structures immediately adjacent to the three wilderness study areas within the **otherwise** mostly natural setting of the ACEC conflicts with wilderness and scenic values.

The Bureau recognizes its commitment to counties in Oregon for no net gain in federal land to maintain a

stable economy and county tax base. Therefore, land exchange is the preferred method of acquisition. If an exchange is not acceptable to the land owner and the land is purchased, the Bureau will, over time, balance land acquisitions with sales.

Impacts Of Alternatives On Land Tenure

Alternative A

- Public acquisition of the 40-acre parcel at Dago Gulch would reduce the Malheur County tax base by approximately \$350.00. This change would be offset by future sales of other public lands in Malheur County.

Alternative B (No Action)

- Malheur County would continue to collect the approximately \$350.00 in property taxes from the owner of the 40-acre private parcel.

Alternative C

- Public acquisition of the 40-acre parcel at Dago Gulch would reduce the Malheur County tax base by approximately \$350.00. This change would be offset by future sales of other public lands in Malheur County.

Alternative D (Preferred Alternative)

- Public acquisition of the 40-acre parcel at Dago Gulch would reduce the Malheur County tax base by approximately \$350.00. This change would be offset by future sales of other public lands in Malheur County.

Minerals

Factor Which Influence Management Prescriptions

Although there are presently no mining claims within the ACEC, the area is open for the location of mining claims. Under the Interim Management Policy and Guidelines for Lands under Wilderness Review, mineral exploration and development on mining claims within Wilderness Study Areas, as with all activities, is regulated to protect wilderness values. Since October of 1990, no surface disturbing work which would require reclamation has been allowed

within **WSAs** in Oregon. Any Congressionally designated wilderness would likely be withdrawn from mineral activity. Mining claims located within the **WSAs** would be subject to validity examination should any development work be proposed following **designation** of the area as wilderness. With a valid discovery, mineral development **could** proceed within the designated wilderness area.

Following Congressional action which does not designate the areas as wilderness, the **WSA** portions of the ACEC would again become available for locatable mineral development.

In the portions of the ACEC which are outside of the Wilderness Study Areas, claims can be located and mineral development **could** proceed as provided for in the General Mining Law of 1872. Mineral development in any open area within the ACEC would be regulated by the 43 CFR 3809 regulations to eliminate unnecessary and undue degradation of the federal lands. These regulations require operators submit a plan of operations for any locatable mineral development proposed within an ACEC. Claimants would have the basic right to pursue development of the claims.

The Northern Malheur Management Framework Plan states that a protective withdrawal from locatable mineral activity is to be secured for the Leslie Gulch ACEC. This withdrawal would remove 11,653 acres from mine claim location or development activity under the General Mining Law of 1872. This withdrawal would require Congressional review to implement since it is in excess of 5,000 acres. The MFP also states that the 11,653 acre ACEC would be closed to salable mineral activity and that mineral leasing be allowed only with no surface occupancy.

Impacts Of Alternatives On Minerals Management

Alternative A

Land Tenure

- Public acquisition of the **40-acre** private parcel would make these lands available for the same minerals management direction as the remainder of the ACEC. Under this alternative, portions of this parcel would be withdrawn from mineral activity. If acquired, this parcel would be partially within each of the three **WSAs**.

Minerals

- The portions of the ACEC not recommended for wilderness designation would not be available for any locatable mineral activities. Congress may adjust the wilderness boundaries during the designation process which could leave portions of the ACEC unprotected by mineral withdrawal. The ACEC has low to moderate potential of occurrence of locatable mineral deposits. No deposits have been identified and there is no direct evidence that any exist within the ACEC. No mines, prospects or mining claims are located within the ACEC.
- Locatable minerals would remain available for location within the **WSAs** and development outside any designated wilderness area. The claimants would have the basic right to development granted under the Mining Law of 1872 after wilderness designation if there was a valid discovery made prior to designation. Locatable minerals exploration and development activities would be regulated under 43 CFR 3809 which require a plan of operations be approved prior to any surface disturbing activity within Wilderness to prevent unnecessary or undue degradation. This requirement would give only limited protection to the Relevant and Important Values for which the ACEC was designated.
- No surface occupancy would be permitted within the ACEC for leasable minerals. Slant drilling could be considered from outside the ACEC to reach oil, gas or geothermal resources located below the surface of the ACEC.
- No salable minerals would be available for development.

Alternative B (No Action)

Land Tenure

- With no public acquisition of the **40-acre** private parcel, mineral values would remain controlled by the landowner and available for development.

Minerals

- A completed withdrawal would eliminate all potential for locatable mineral activities within the ACEC for twenty years. The portions of the ACEC designated wilderness would likely have a permanent mineral withdrawal. The ACEC has low to moderate potential of occurrence of locatable mineral deposits. No deposits have been identified

and there is no **direct** evidence that any exist within the ACEC. No mines, prospects or mining claims are located within the ACEC. The potential for loss of availability of mineral resources within the ACEC would be insignificant.

- The relative and important values for which the ACEC was designated would be protected from adverse impacts from minerals exploration and development under the Mining Law of 1872.
- No surface occupancy would be permitted within the ACEC for leasable minerals. Slant drilling could be considered from outside the ACEC to reach oil, gas or geothermal resources located below the surface of the ACEC.
- No salable minerals would be available for development.

Alternative C

Land Tenure

- Public acquisition of the **40-acre** private parcel would make these lands available for the same minerals management direction as the remainder of the ACEC. If acquired, this parcel would be partially within each of the three **WSAs**.

Minerals

- Locatable minerals would remain available for location in the entire ACEC and development outside any designated wilderness area. No surface disturbance which requires reclamation would be allowed within the **WSAs** as long as they remain in study status. Claimants would have the basic right to development granted under the Mining Law of 1872. Locatable minerals exploration and development activities would be regulated under 43 CFR 3809 which requires a plan of operations be approved prior to any surface disturbing activity within **ACECs** to prevent unnecessary or undue degradation. This requirement would give only limited protection to the Relevant and Important Values for which the ACEC was designated.
- No surface occupancy would be permitted within the ACEC for leasable minerals. Slant drilling **could** be considered from outside the ACEC to reach oil, gas or geothermal resources located below the surface of the ACEC.
- No salable minerals would be available for development.

Alternative D (Preferred Alternative)

Land Tenure

- Public acquisition of the 40-acre private parcel would make these lands available for the same minerals management direction as the remainder of the ACEC. Under this alternative, this parcel would be withdrawn from all mineral activity.

Minerals

- A mineral withdrawal would eliminate all potential for activities within the ACEC for twenty years. The **WSA** portions of the ACEC, if designated wilderness, would likely have a permanent withdrawal. The ACEC has low to moderate potential of occurrence of locatable mineral deposits. No deposits have been identified and there is no direct evidence that any exist within the ACEC. No mines, prospects or mining claims are located within the ACEC. The potential for loss of availability of mineral resources within the ACEC would be insignificant.
- The relative and important values for which the ACEC was designated would be protected from adverse impacts from minerals exploration and development under the Mining Law of 1872.
- No surface occupancy would be permitted within the ACEC for leasable minerals. Slant drilling **could** be considered from outside the ACEC to reach oil, gas or geothermal resources located below the surface of the ACEC.
- No salable minerals would be available for development.

Monitoring Needs

- Portions of the ACEC remaining open for mineral development would require monitoring of any proposed activity. Mining claim activity is regulated to prevent unnecessary or undue degradation of the public lands.

Livestock Grazing

Factors Which Influence Management Prescriptions

Regulation of grazing began with passage of the Taylor Grazing Act in 1934, which has been amended with various laws and regulations, including the

National Environmental Policy Act, Federal Land Policy and Management Act, and the Public Rangeland Improvement Act.

Livestock use was limited (adjudicated) to carrying capacity in this area, known as the Mahogany Planning Unit in the early 60s. The adjudication reduced the active grazing preference by 33 percent. This reduction was put into a suspended, non-use state. This plan does not analyze the impacts of this reduction.

The latest land use planning was completed in 1984 with the Southern Malheur Grazing Environmental Impact Statement (EIS) and Rangeland Program Summary (RPS). In those plans livestock use was allocated and objectives were set specifically by pasture for the EIS area, which included the pastures within the ACEC. The pastures within the ACEC were identified as Leslie Gulch and Bannock within the Mahogany Allotment (0500). The allotment at that time contained 327,129 federal acres, and grazing preference was allotted at 34,848 AUMs.

In 1984 the Mahogany Allotment was divided into five permanent and six temporary allotments. A 1988 decision to make the temporary allotments permanent is currently under appeal. The Bannock and Leslie Gulch pastures are within the Three Fingers temporary allotment which has 9,981 active and 4,653 suspended AUMs with four grazing permittees. Currently the two pastures are used by two of the permittees, Bud Greeley and Delbert Allison.

Livestock actual use records for the area exist since 1973. At that time the Leslie Gulch pasture was considered a part of the Riverside pasture, adjacent to and immediately north of the Leslie Gulch pasture. The two pastures are divided only by natural barriers, and a small amount of livestock movement can take place between the two pastures. Use from 1973 until 1979 in the two pastures was with up to 1400 cattle and 3500 AUMs, between April and December. In 1979, Leslie Gulch was recognized as a separate pasture and livestock use was greatly reduced. Present use of the Leslie Gulch pasture is 132 cattle with 264 AUMs from March 1 to April 30.

The Bannock pasture is used by approximately 450 cattle from May 1 to October 31 in a deferred rotation grazing system with three additional pastures, with use being deferred after the critical growth period of key forage species (approximately July 1) two out of three years.

An allotment evaluation completed in 1990 estimated the livestock carrying capacity in Leslie Gulch pasture at 948 AUMs and Bannock pasture at 928 AUMs. Trend of upland vegetation was improving in the Bannock pasture and not apparent for the Leslie Gulch pasture. Utilization studies of key forage species have been conducted in the Leslie Gulch pasture since 1985, with the highest recorded utilization of key forage species being 16 percent. Utilization studies in the Bannock pasture from 1978 to 1989 indicated the average utilization of key forage species was 39 percent.

Impacts Of Alternatives On Livestock Grazing

Alternative A

Livestock Grazing

- The livestock operators would be required to alter their operations by finding alternative feed and pasture for the 132 cattle from March 1 to April 30.
- The potential for activation of suspended AUMs held by these and other permittees in the allotment would be decreased by the 264 AUMs because of the loss of use of this pasture and a portion of the Bannock pasture added to the Leslie Gulch pasture. The possibility of future reductions in active preference would be also increased as a result of a loss of the use of this area.
- The lower seral vegetative conditions of the bottom areas near the Owyhee Reservoir should improve over time due to the elimination of livestock use. The rate of improvement may be slightly greater than under Alternatives B and C.

Alternative B (No Action)

Livestock Grazing

- This alternative would not affect the present livestock operations.
- The lower seral vegetative conditions in lower canyon bottom sites should improve over time due to the restricted period of use and the current low utilization levels of key perennial forage species. The rate of improvement may be slower than under Alternatives A, C or D.

The Three Fingers allotment (see allotment map) is currently utilized by four grazing permittees with 9981 active and 4653 suspended AUMs. Total acreage is 139,354. The allotment has been managed under the following informal deferred rotation grazing system:

<u>Pasture</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
<u>All Users</u>			
<u>Riverside*</u>	<u>3/1-5/1</u>	<u>3/1-5/1</u>	<u>3/1-5/1</u>
<u>Greeley & Allison</u>			
<u>Leslie Gulch†</u>	<u>3/1-5/1</u>	<u>3/1-5/1</u>	<u>3/1-5/1</u>
<u>Sulpher Spring Sdg</u>	<u>5/1-6/15</u>	<u>6/20-7/30</u>	<u>6/25-8/5</u>
<u>Saddle Butte</u>	<u>6/10-7/25</u>	<u>5/1-6/25</u>	<u>8/1-10/30</u>
<u>Bannock</u>	<u>8/1-10/30</u>	<u>7/25-10/30</u>	<u>5/1-7/1</u>
<u>Cunningham & Mackenzie</u>			
<u>Sheephead Seeding*</u>	<u>5/1-7/15</u>	<u>6/5-9/1</u>	<u>6/15-9/1</u>
<u>McIntyre*</u>	<u>7/10-9/1</u>	<u>9/5-10/30</u>	<u>5/1-6/20</u>
<u>Devils Gate</u>	<u>8/25-10/5</u>	<u>5/20-6/10</u>	<u>9/1-10/5</u>
<u>Campkettle South</u>	<u>10/1-10/30</u>	<u>5/1-5/25</u>	<u>10/1-10/30</u>
<u>Mackenzie</u>			
<u>Blackrocks*</u>	<u>12/1-3/31</u>	<u>12/1-3/31</u>	<u>12/1-3/31</u>
<u>Campkettle North</u>	<u>1/1-3/31</u>	<u>1/1-3/31</u>	<u>1/1-3/31</u>

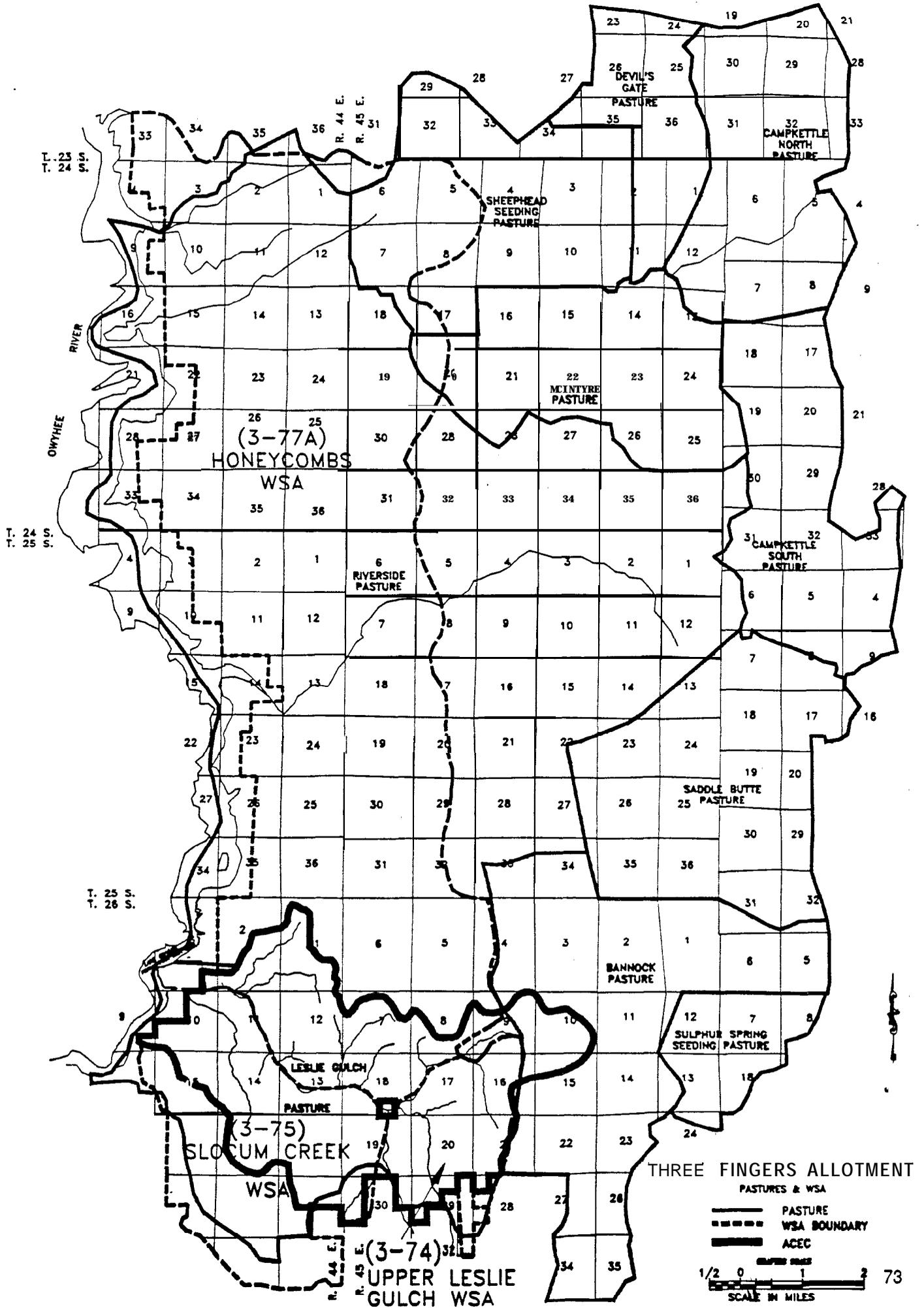
*Pastures containing Wilderness Study Areas

The two permittees that currently use the Leslie Gulch pasture are Delbert Greeley and Andrew Allison Jr. The normally licensed use in the above pastures is as follows:

<u>Allison</u>	<u>66 cattle 3/1 to 4/30 132 AUMs</u>	
	<u>233 cattle 3/1 to 4/30 468 AUMs</u>	
	<u>233 cattle 5/1 to 6/15 353 AUMs</u>	
	<u>180 cattle 6/16- 9/30 630 AUMs</u>	
<u>Greeley</u>	<u>66 cattle 3/1 - 4/30 132 AUMs</u>	
	<u>218 cattle 3/1 4/30 438 AUMs</u>	
	<u>223 cattle 5/1 6/15 337 AUMs</u>	
	<u>162 cattle 6/16- 9/1 405 AUMs</u>	<u>(This use has at times been 9/2-9/30)</u>
	<u>10 horses 4/1 0/30 70 AUMs</u>	

Monitoring data indicates the following for the pastures used by Greeley and Allison:

<u>Pasture</u>	<u>Available</u>	<u>Demand</u>	<u>Acres</u>	<u>Vegetative</u>	
<u>AUMs</u>	<u>AUMs</u>			<u>Trend</u>	<u>Objective</u>
<u>Bannock</u>	<u>928</u>		<u>12238</u>	<u>Upward</u>	<u>improve</u>
<u>Saddle Butte</u>	<u>839</u>		<u>11963</u>	<u>Upward</u>	<u>Improve</u>
<u>Sulpher Sp Sdg</u>	<u>492</u>		<u>2024</u>	<u>Static</u>	<u>Maintain</u>
<u>Total</u>	<u>2259</u>	<u>1954</u>	<u>26225</u>		



T. 23 S.
T. 24 S.

T. 24 S.
T. 25 S.

T. 25 S.
T. 26 S.

R. 44 E.
R. 45 E.

(3-77A)
HONEYCOMBS
WSA

(3-75)
SLOCUM CREEK
WSA

(3-74)
UPPER LESLIE
GULCH WSA

26
DEVIL'S GATE
PASTURE

4
SHEEPHEAD
SEEDING
PASTURE

22
MCINTYRE
PASTURE

6
RIVERSIDE
PASTURE

31
CAMPKETTLE
SOUTH
PASTURE

19
25
SADDLE BUTTE
PASTURE

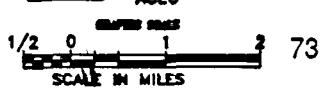
BANNOCK
PASTURE

12
7
SULPHUR SPRING
SEEDING
PASTURE

LESLIE GULCH
PASTURE

THREE FINGERS ALLOTMENT
PASTURES & WSA

- PASTURE
- WSA BOUNDARY
- ACEC



Alternative C

Livestock Grazing

- The livestock operators would be required to alter their operations by finding alternative feed and pasture for the 132 cattle from March 1 to April 30. This cost would be offset by the saving of feed and pasture costs for the 88 head of cattle that would graze the pasture from 12/1 to 2/28. The other permittees in the allotment would not be affected.
- The lower seral vegetative conditions of the bottom areas near the Cwyhee Reservoir should improve over time due to low utilization levels of key perennial forage species and due to grazing during the dormant season of these species.

Alternative D (Preferred Alternative)

Livestock Grazing

- The livestock operators would be required to alter their operations by grazing the 264 AUMs in September and October rather than during March and April.
- The potential for activation of suspended AUMs held by these and other permittees in the allotment would be decreased by the 264 AUMs that would be shifted to other parts of the allotment because of the loss of use of this pasture. The possibility of future reductions in active preference would be increased as a result of a loss of the use of this pasture and the increased use in the other parts of the allotment.
- The lower seral vegetative conditions of the bottom areas near the Owyhee Reservoir should improve over time due to the elimination of livestock use. The rate of improvement may be slightly faster than under Alternatives B or C.

• None of the actions considered for grazing relocation would represent a change in the season of use or require a change in the current grazing system for the allotment. Total livestock numbers would not be increased in the three pastures. Active grazing preference would not change in the allotment.

• The Bannock, Saddle Butte and Sulphur Spring Seeding pastures do not contain any Wilderness Study Areas, critical big game winter range, threatened and endangered species, wildhorse herd management areas, riparian management

areas, wild and scenic rivers, farmlands or hazardous wastes, Air quality, cultural resources, ACECs and native american religious concerns

- Livestock associated impacts such as trampling and utilization in the Bannock, Saddle Butte and Sulphur Spring Seeding pastures is expected to be minor with the 264 AUMs being spread over 26 225 acres. The 264 AUMs would represent a 12 percent increase in livestock use in the three pastures.
- Livestock use would be primarily after the critical growth period of forage species and is not expected to negatively impact vegetative condition or trend, wildlife or wildlife habitat.
- Livestock demand in the three pastures would be 41 AUMs below the calculated AUMs available for livestock.

Monitoring Needs

- Trend studies would be established within the ACEC to determine changes in plant composition in areas used by livestock.
- Forage utilization data and livestock use data would be continued to be collected annually to determine pattern and amount of vegetation removed by grazing animals in areas used by livestock.
- Use supervision of grazing and monitoring for unauthorized use including drift of livestock from the adjacent Bannock and Riverside pastures would continue.

Noxious Weeds

Factors Which influence Management Prescriptions

Noxious weeds present a substantial threat to all plants, including the special status species and their habitats. These exotics, capable of growing on a wide variety of soil types, are aggressive competitors, eliminating or replacing native vegetation. Three noxious weeds have been identified in the Leslie Gulch ACEC: Scotch thistle (*Onopordum acanthium*), whitetop (*Cardaria draba*) and St. John's wort (*Hypericum perforatum*). Invading biennial Scotch thistle has been found in road corridors from the overlook to the Cwyhee Reservoir; five sites of

the perennial, rhizomatous whitetop are established adjacent to the Leslie Gulch Road with the colonies beginning to extend into native vegetation. Within the past five years, increasing numbers of both of these species have been observed along the roadways east of the ACEC. St. John's wort has been found at one site in Slocum Creek and at one site near Mud Spring. Biological controls have not been found for whitetop or Scotch thistle. A beetle is used to control severe infestations of St. John's wort. Potential invasion by other species, such as the knapweeds (*Centaurea* spp.) and yellow star thistle (*Centaurea solstitialis*), presents additional threats to native plants.

Limited chemical control (spraying) of Scotch thistle has occurred at the Overlook, and all three noxious weed species have been manually removed during the past two field seasons. A Pesticide Use Proposal (PUP) has been developed by the Vale District for Leslie Gulch which permits limited chemical control of noxious weeds from the overlook site to the Owyhee Reservoir under the purview of a botanist or individual designated by the botanist. This PUP has been developed in accordance with the Northwest Area Noxious Weed Control Program EIS Supplement dated 05/05/87.

Manual control methods are somewhat effective for controlling scattered individuals of noxious weeds. In dense stands or when the weed species spread by rhizomes, manual control methods are much less effective. Generally, the most effective control is a combination of spraying when the plants are green and manual removal of any developed seed heads. Extensive and dense stands of noxious weeds make manual control extremely costly and ineffective. In these situations, the most satisfactory mode of control includes site-specific, carefully-controlled spraying in the spring. For whitetop, chemical application when the plants are green and budding, but prior to bloom, so that the herbicide can be translocated into the rhizomes, is most effective. Manual control of scattered Scotch thistle and St. John's wort is effective.

Impacts Of Alternatives On Noxious Weeds

Alternative A

Access and Roads

- Additional pullout/parking areas would remove native vegetation and provide a disturbed habitat for colonization by weeds.
- Closure and successful rehabilitation of the Steamboat Ridge Road would eliminate the open niches favorable to weed establishment.

Land Tenure

- With acquisition of the 40-acre private parcel, aggressive weed control activities could be pursued by the BLM on the land.

Minerals

- Withdrawing those areas near the Leslie Gulch Road from mineral entry would eliminate the potential for mining related disturbances in these areas. Disturbances here would be particularly susceptible to weed invasion due to the proximity to the road.

Noxious Weeds

- Manual weed control alone has limited effect in controlling noxious weeds. Difficulty of removing by hand all the rhizomes of whitetop and other rhizomatous species reduces the effectiveness of this method when compared to a combination of manual and chemical control methods.

Livestock Grazing

- With livestock removal from the Leslie Gulch pasture, the lower seral vegetative conditions of the bottom areas near the Owyhee Reservoir may again support perennial native grasses, thus helping to eliminate open niches where weeds may colonize.
- The potential for livestock transport of weed seed would be eliminated.

Wild Horses

- Removal of wild horses from the ACEC would eliminate the potential for weed seed transport by these animals.

Recreation

- Restricting permitted group size to a maximum of 6 persons would reduce the potential of these activities to spread noxious weed seeds.
- Eliminating recreational horse use would help reduce dissemination of weed seeds from existing sites, as well as eliminate the transportation of new invaders into the area through hay and animal transport.
- Removal of the Back Country Byway and Watchable Wildlife designations and the limited recreational development would likely reduce the rate of visitor use increase in the ACEC, thus reducing the potential for the spread of existing noxious weeds and introduction of new invaders.

Alternative B (No Action)

Access and Roads

- Continued use of the Steamboat Ridge Road would increase the potential for colonization of noxious weeds along the road.

Land Tenure

- The portion of the 40 acre parcel in a highly disturbed condition presents fine habitat for establishment of exotic species. If this parcel is not acquired, and the land owner does not control noxious weeds, weeds on this land could provide a significant weed seed source for adjacent areas of the ACEC.

Minerals

- Once withdrawn, no disturbances would occur to the land from locatable mineral activity, resulting in no new niches becoming available for colonization by noxious weeds.

Noxious Weeds

- The combination of manual and chemical control methods should be effective in controlling noxious weeds.

Livestock Grazing

- Continuation of current grazing practices should result in improved vegetative conditions in the bottom land areas near the Owyhee Reservoir. This improvement would help reduce weed

invasion over time, but the rate of improvement would be the slower under this alternative than under Alternatives A, C and D.

- The potential for livestock transport of weed seeds would continue.

Wild horses

- The potential for wild horses to transport weed seeds within the ACEC would continue.

Recreation

- Without a defined maximum size of permitted group activities, these groups would have a larger potential for spreading noxious weed seeds under this alternative.
- With no control over horse use, noxious weed seeds could be brought into the area in hay or through the horses themselves.
- Retention of the Back Country Byway and Watchable Wildlife designations would likely attract more visitors to the area and increase the potential for noxious weed spread and new weed introduction under this alternative.

Alternative C

Access and Roads

- Additional pullout/parking areas would remove native vegetation and provide a disturbed habitat for colonization by weeds.
- The Steamboat Ridge Road would remain open for colonization of noxious weeds.
- More extensive road maintenance work also would contribute to opening new sites for establishment of weeds.

Land Tenure

- With acquisition of the **40-acre** private parcel, weed control activities could be pursued by the BLM on the land.

Minerals

- All sites disturbed from locatable mineral activities would present fresh surfaces available for colonization by weeds.

Noxious Weeds

- The combination of manual and chemical control methods should be effective in controlling noxious weeds.

Livestock Grazing

- Changing the season of grazing to winter should improve vegetative conditions of the bottoms near the Owyhee Reservoir. These areas would then be less susceptible to weed invasion, but the conditions would not improve as rapidly as under Alternatives A and D.
- The potential for livestock transport of weed seeds would continue.

Wild Horses

- The potential for wild horses to transport weed seeds within the ACEC would continue.

Recreation

- With no controls on the size of permitted group activities, these groups would have a larger potential for spreading and introducing noxious weed seeds under this alternative.
- Limiting hay use to certified weed-free hay would help in reducing introduction of new weeds in the ACEC, but the possibility of weed introduction through horses would not be totally eliminated.
- Retention of the Back Country Byway and Watchable Wildlife designations and the increased recreational developments proposed under this alternative would likely attract more visitors to the area and increase the potential for noxious weed spread and introduction.

Alternative D (Preferred Alternative)

Access and Roads

- With continued use of the Steamboat Ridge Road, the potential for colonization of noxious weeds along the road would remain.
- Additional pullout/parking areas would remove native vegetation and provide a disturbed habitat for colonization by weeds. Aggressive planting of native species on newly disturbed **locations** would partially mitigate weed invasion.

Land Tenure

- With acquisition of the **40-acre** private parcel, aggressive weed control activities could be pursued by the BLM on the land.

Minerals

- Once withdrawn, no surface disturbances would occur from mineral activity, resulting in no new niches becoming available for colonization by noxious weeds.

Noxious Weeds

- **The** combination of manual and chemical control methods should be effective in controlling noxious weeds.

Livestock Grazing

- With livestock removal from the Leslie Gulch pasture, there would be a slightly faster improvement in perennial vegetation condition. The lower seral vegetative conditions of the bottom areas near the Gwyhee Reservoir may again support perennial native grasses, thus helping to eliminate open niches where weeds may colonize.
- The potential for livestock transport of weed seed would be eliminated.

Wild horses

- Removal of wild horses from the ACEC would eliminate the potential for weed seed transport by these animals.

Recreation

- Restricting permitted group size to a maximum of 6 persons would reduce the potential of these activities to spread and introduce noxious weed seeds and damage desirable vegetation which provides competition for weeds.
- Eliminating recreational horse use would help reduce dissemination of weed seeds from existing sites, as well as eliminate the transportation of new invaders into the area through hay and animal transport.
- Removal of the Back Country Byway and Watchable Wildlife designations and the limited recreational development would likely reduce the

rate of increased of visitor use in the ACEC, thus reducing the potential for the spread and introduction of noxious weeds.

Monitoring Needs

- Effectiveness of the various control methods on elimination **and/or** control of existing populations of noxious weeds would be monitored.
- Annual assessments of rate of spread and occurrences of existing and new exotic species in the canyons would be made.

Wild Horses

Factors Which Influence Management Prescriptions

The Wild Horse and Burro Act of 1971 provided for the management and protection of wild horses. The Three Fingers Herd Management Area was established as a result of that act with current boundaries and numbers established in the Northern Malheur Management Framework Plan of 1983. This plan provided for maintaining between 75 and 150 wild horses.

Wild horses are inventoried annually, provided funding is available. Currently the horse use occurs outside of the ACEC with little or no use within the ACEC. Historically significant use by wild horses took place within the ACEC, and a horse trap site was located in Juniper Gulch with over 200 horses being gathered from the area in the late 1960s.

Impacts Of Alternatives On Wild Horses

Alternative A

- Removing the Leslie Gulch ACEC from the HMA would have few, if any, impacts because the horses are not presently utilizing the portion of the herd area within the ACEC. The horses have been observed within 0.25 mile of the ACEC in recent times, and it is probable that they **would** move into the ACEC in the future as this historically was horse range. Horses that move into the ACEC would be removed initially by moving the horses from the ACEC back into the HMA. If the horses were to return, they would have to be gathered and either moved to other herd areas or put up for

adoption, Any future opportunities for recreational wild horse viewing would be precluded.

Alternative B (No Action)

- There would be no change to the existing situation. Wild horses would continue to be allowed to use the ACEC.

Alternative C

- There would be no change to the existing situation. Wild horses would continue to be allowed to use the ACEC.

Alternative D (Preferred Alternative)

- Removing the Leslie Gulch ACEC from the HMA would have few, if any, impacts because the horses are not presently utilizing the portion of the herd area within the ACEC. The horses have been observed within 0.25 mile of the ACEC in recent times, and it is probable that they would move into the ACEC in the future as this historically was horse range. Horses that move into the ACEC would be removed initially by moving the horses from the ACEC back into the HMA. If the horses were to return, they would have to be gathered and either moved to other herd areas or put up for adoption. Any future opportunities for recreation wild horse viewing would be precluded.

Monitoring Needs

- The ACEC will be monitored to determine if and when horse use begins.
- Outside the ACEC, within the HMA, horse herd populations, annual forage utilization and vegetation trends would continued to be monitored.

Special Status Plants

Factors Which Influence Management Prescriptions

At least five special status plant species are found in concentrated numbers in the ACEC. Table I in Appendix 1 shows the federal candidate species being considered for listing under the Endangered Species Act, the number of acres of their habitat in the Leslie Gulch ACEC, and the total number of habitat acres for the entire species range.

Erter's groundsel is an annual species, initiating growth in early spring and completing its life cycle by the end of November. Its global distribution is limited to the Leslie Gulch vicinity and to two small sites near Birch Creek, approximately six miles southwest of **Leslie** Gulch. Suitable habitat sites have been surveyed in the Honeycombs to the north, but only one site has been found. Little potential habitat remains to be explored for the species, and it is anticipated that at least 90 percent of the plant sites have been identified. Numbers of plants vary dramatically based on timing and amount of rainfall in the area.

Packard's blazing star also is an annual species, with its life cycle generally completed by late June. It grows on the same loose talus rubble as **Erter's** groundsel but only on the lower slopes and more gentle fans which spread out at the base of the talus runs. Outside of Leslie Gulch, only a single site in northern Nevada is known for this species. Very little potential habitat remains to be examined for Packard's blazing star, and the likelihood of additional site discoveries is slim.

Grimy ivesia, a perennial herb, grows on five discrete sites in the Vale District, three of which are in the Leslie Gulch ACEC. One other small site is known from Lake County, and two sites have been identified in northern Nevada. In spite of its fairly wide distribution, the species is extremely special status. It is restricted in our region to barren outcrops of Leslie Gulch Ash-Flow Tuff with two to three inches of rubble on top, a harsh site with little rooting depth.

Inventories to locate more populations have been unsuccessful.

Owyhee clover grows on scattered sites in the Leslie Gulch ACEC, and also outside the area. All are found east of the Owyhee Reservoir. Little is known about this species, and it is anticipated that more sites will be located with intensive inventory. Succulent legumes such as thie are palatable to herbivores.

Of the special status species in the Leslie Gulch ACEC, sterile milk-vetch is the most wide-spread geographically and in terms of known numbers and number of sites, although it is endemic to the Owyhee Region. It occupies loose ash sites of varying **colors** and textures. An extensive inventory for the species has been conducted east of the Owyhee **Reservoir**, and more sites are anticipated to be found when a similar inventory can be conducted west of the reservoir.

None of the special status plant species in Leslie Gulch are listed as either endangered or threatened under the Endangered Species Act of 1973. However, as candidate species, five of the species are managed under BLM policy which states that "The BLM . . . shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as Threatened or Endangered." (BLM Manual 6640.06-C)

Impacts Of Alternatives On Special Status Plants

Alternative A

Access and Roads

- Road maintenance would continue to impact small portions of special status plant sites which are already in a disturbed state due to past road construction. A few plants continue to occupy this disturbed area yearly. Opportunities to minimize borrow ditch maintenance at two locations where **Erter's** groundsel is found may help prevent loss of plants at those sites and may result in establishment of more plants at these sites. If the road is outsloped where it has disrupted deposition of talus **outwash**, any **outwash** will pass over the road and form new habitat downstream of the road, rather than diverting water down the roadside ditch. Seeds of the special status species would flow unrestricted into the habitat.
- The two pullout/parking areas proposed for construction **could** benefit special status plant habitat elsewhere by dispersing recreational use in the canyon. The parking area closest to the Owyhee Reservoir could direct dispersed hiking into some areas of known plant habitat. Damage to special status plants and habitat through construction of this parking area would be avoided, and subsequent hiker impacts would likely be negligible due to the large extent of area which **could** be traversed and the unattractive nature of the special status plant habitat.

Land Tenure

- Acquisition of the 40-acre private inholding **would** extend BLM protection measures to one site supporting **Erter's** groundsel. Reduced recreational use of this area would result if water developments were removed, reducing potential impacts to the **Erter's** groundsel site.

Minerals

- Withdrawal of the nonwilderness portions of the ACEC from locatable mineral activities would protect the special status plant sites in these areas from potential disturbances. A limited number of sites supporting grimy ivesia, sterile milk-vetch, Packard's blazing star and Enter's groundsel are found in these areas.

Livestock Grazing

- Removal of livestock grazing from the Leslie Gulch pasture would eliminate all threats to special status plants associated with livestock grazing. These threats include destruction of habitat through trailing, destruction of plants by trampling and ingestion, and transport of weed seeds. The lower seral vegetative conditions of the bottom areas near the **Owyhee** Reservoir would improve faster under this alternative than under Alternative B or C, thus reducing vegetative niches where weeds may colonize.

Noxious Weeds

- Manual weed control alone would eliminate the chances that special status plants or any other non-target plant species would be inadvertently sprayed. Because this control method is less effective than others, there would be an increased chance that existing weed infestations would expand.

Wild Horses

- Removal of wild horses from the ACEC would reduce the potential for impacts to special status plants, such as trampling of habitat and weed dispersal. Within the last five years, no wild horses have been observed in the ACEC, and consequently no impacts of wild horses to special status plants have been observed. The potential for wild horse use in the area currently exists because the boundary of the ACEC is not fenced and the area is administratively open to wild horse use.

Special Status Plants

- Addition of the gate in lower Dago Gulch would benefit special status plants by reducing the opportunity for vehicle traffic to pass over the plant sites adjacent to the Dago Gulch Road.

Wildlife

- Since bighorn sheep were part of the coexisting flora and fauna of the area prior to stabilized human settlements, maintenance of a viable herd of bighorn sheep is considered compatible with special status plant management. No studies documenting use of bighorns on Owyhee clover have been conducted, and the interrelationship between the two species is not known, but it is likely that **bighorns** do eat the clover. There are no documented impacts by the bighorn or other wildlife on the special status plant species in the ACEC.

Recreation

- Increased recreational use in the ACEC would increase the potential for impacting special status plants and plant habitat. Direct impacts include disturbance to individual plants and their habitat. Indirect **effects** would include dissemination of exotic weed seeds at the Slocum Creek campground and in hiking corridors. Alternative A would have less recreational impact than Alternative C, but more than Alternative B and the same as Alternative D.
- Removal of the Back Country Byway and Watchable Wildlife designations would reduce the potential for recreational impacts to special status plants by possibly reducing the rate of increased recreational use in the ACEC.
- If determined necessary, placement of site-specific signs or trail segments which would route hikers around special status plant sites would reduce impacts to these sites.
- Eliminating recreational horse use would reduce dissemination of weed seeds through hay and animal transport. Seed dissemination would remain a concern during administrative use of horses in the ACEC. Impacts of horses on fragile soils and special status plant sites would also be eliminated.
- Instituting a back country permit system would allow controls to be placed on the amount of recreational use. Such a permit system would lessen potential recreational impacts on special status plants and their habitat.
- Limiting Special Recreational Use Permits to a maximum party size of six persons would aid in the avoidance of special status plant habitat.

Alternative B (No Action)

Access and Roads

- Road maintenance at current levels affects special status plant sites which are already in a disturbed state due to past road construction. If kept at current levels, disturbance will continue to occur to the borrow ditches along which **Erter's** groundsel is sporadically found. Opportunities to minimize borrow ditch maintenance at two locations where Erter's groundsel is found may help prevent loss of plants at those sites and may result in greater establishment of plants on those sites.
- Keeping Steamboat Ridge Road open would have no effect on special status plants.

Land Tenure

- If the **40-acre** private inholding were not acquired, one Erter's groundsel site would remain unprotected.

Minerals

- Withdrawal of the ACEC from locatable minerals would protect special status plants and their habitats from these potential disturbances. Salable minerals are available at the discretion of local BLM managers and would be developed only after environmental analysis showed that impacts to other values could be mitigated. The Northern Malheur MFP has removed the ACEC from leasable mineral activity.

Livestock Grazing

- Continuation of current grazing practices would result in continued threats to the special status plants. These threats include destruction of habitat through trailing, destruction of plants by annual trampling and ingestion, and transport of weed seeds. At certain sites habitat destruction may cause local plant extinctions.
- The lower seral vegetative conditions of the bottom areas near the reservoir should improve over time due to the low utilization levels of key perennial forage species. The rate of improvement may be slightly slower than under Alternatives A, C or D.

Noxious Weeds

- Careful use of both manual and chemical methods to control noxious weeds would effectively reduce the threat of habitat loss. However, there would be a slight risk of inadvertent spraying of special status plants under this alternative.

Wild Horses

- Impacts of wild horses to special status plants, including habitat destruction and transport of weed seeds, may occur with the area remaining open to wild horse use.

Special Status Plants

- With no gate installation in lower Dago Gulch, vehicles could impact the special status plant sites along the road there.

Wildlife

- Since bighorn sheep were part of the coexisting flora and fauna of the area prior to human settlement, maintenance of a viable herd of bighorn sheep is considered compatible with special status plant management. There is no documented evidence that bighorn sheep or any other wildlife impact any of the special status plant species in the ACEC.

Recreation

- The current level of recreational development and restrictions would continue to cause damage to special status plants damage in Dago Gulch and near the Slocum Creek campground. The level of recreational development proposed under Alternative B would make the ACEC the least attractive of the three alternatives and result in the least recreational impact to special status plants. Recreational horse use would have the potential for noxious weed seeds transport into the area in hay or through the horses themselves.

Alternative C

Access and Roads

- Road maintenance affects special status plant sites which are already disturbed from past road construction. Opportunities to minimize borrow ditch maintenance at two locations where Erter's groundsel is found may help prevent loss of plants at those sites and promote establishment of plants.

- The four proposed pullout/parking areas are not located in special status plant habitat. These pullout areas could benefit special status plant habitat elsewhere by dispersing recreational use in the ACEC. The proposed new parking area closest to the reservoir could direct dispersed hiking into some areas of known plant habitat. Any damage to special status plants and resulting from construction of this turnout and subsequent hiker dispersal would likely be negligible.
- Keeping the Steamboat Ridge Road open would have no effect on special status plants.

Land Tenure

- If the **40-acre** private inholding were not acquired, one **Ertter's** groundsel site would remain unprotected.

Minerals

- Mineral development activities **could** destroy and displace special status plants. Seed banks contained within soils could be destroyed, genetic diversity reduced, and habitat permanently lost. The extent and location of activities would determine the severity of impacts to the special status plants. Standard reclamation practices may not replace the conditions necessary for plant survival on the unique substrates where the plants grow when the plant sites are disturbed.

Livestock Grazing

Changing the season of grazing from the current use to winter use would not eliminate potential mechanical or grazing damage to grimy ivesia plants since this species does not go dormant in winter. The other perennial special status species, Owyhee **clover** and sterile milk-vetch, go dormant in winter and would be less susceptible to damage during the winter.

Winter grazing would not damage either of the two annual species, **Ertter's** groundsel and Packard's mentzelia, which complete their life cycles by winter.

Frozen ground in the winter would reduce the chance for soil compaction and disturbance on many special status plant sites. The exception would be south slopes at lower elevations which receive solar radiation and may warm sufficiently to prevent freezing of the soil.

- The lower elevation, south-facing slopes near the reservoir provide open, thermally-desirable areas with accessible water which could cause livestock to congregate in these areas. Shadscale, which often grows on the ash talus and also supports the special status plant species, is extensively used by livestock during the winter months. These features would attract livestock to the high concentration of special status plant sites in lower Slocum Creek, increasing damage to plant habitats through soil compaction.
- Changing to winter grazing should improve vegetative conditions of the bottom areas near the reservoir. These areas would then be less susceptible to weed invasion, but the conditions may not improve as rapidly as under Alternative A or D.

Noxious Weeds

- Careful use of both manual and chemical methods to control noxious weeds would **effectively** reduce for special status plants. There would be some risk of inadvertent spraying special status plants under this alternative.

Wild Horses

- Impacts of wild horses to special status plants, including habitat destruction and transport of weed seeds, may occur with the area remaining open to wild horse use.

Wildlife

- Bighorn sheep were part of the coexisting flora and fauna of the area prior to stabilized human settlements, and maintenance of a viable herd of bighorn sheep is compatible with special status plant management. No studies documenting use of sheep on Cwyhee clover have been conducted, and the interrelationship between the two species is unknown, but it is likely that **bighorns** do eat the clover. There are no documented impacts by the bighorn or other wildlife on othe special status plant species in the ACEC.

Recreation

- Issuance of special recreation use permits for organized events would allow use to be directed only to specified areas which would avoid special status plant sites.
- Campground expansion at Slocum Creek would put the campground within 50 feet of a talus slope

which supports **Erter's** groundsel. This expansion would increase the possibility that campers would impact the plant site. This impact could be partially mitigated public education **and/or** by construction of a fence.

- Providing potable water at the Slocum Creek campground would attract more visitors to the area, which would increase chances of impacts to the special status plant sites.
- Requiring weed-free hay for recreational horse use within the ACEC would reduce the potential of weed dispersal, but would not totally eliminate the problem because horses can carry weed seeds in their hooves and digestive tracts.
- Development of an equestrian campsite and installation of a vault toilet at Dago Gulch would not impact special status plants there. Camping with horses, however, may introduce weeds into the area.
- Expanding facilities at the boat launch area would not directly affect special status plants or their habitat: however, increased visitor use of the ACEC resulting from improved facilities may impact plants.
- Neither of the two proposed picnic areas is anticipated to affect special status plants or their habitats.
- Maintaining the special designations of Scenic Byway and Watchable Wildlife, combined with the level of recreational development proposed under Alternative C, would invite more visitor use to the ACEC than Alternatives A and D.

This increased use would increase the likelihood that special status plant sites would be affected by recreational activities.

Alternative D (Preferred Alternative)

Access and Roads

- Road maintenance would continue to impact several special status plant **sites** which are already in a disturbed state due to past road construction. A few plants continue to occupy this disturbed area yearly. Opportunities to minimize borrow ditch maintenance at two locations where Erter's groundsel is found may help prevent loss of plants at those sites and may result in establishment of more plants. If the road is outsloped where it has

disrupted deposition of talus **outwash**, any **outwash** will pass over the road and form new habitat downstream of the road, rather than diverting water down the roadside ditch. Seeds of the special status species would flow unrestricted into the habitat.

- Keeping Steamboat Ridge Road open would have no effect on special status plants.
- The up to four proposed pullout/parking areas are not located in special status plant habitat. These pullout areas could benefit special status plant habitat elsewhere by dispersing recreational use away from the habitat in the ACEC. The proposed new parking area closest to the reservoir could direct dispersed hiking into some areas of known plant habitat. Any damage to special status plants and resulting from construction of this pullout and subsequent hiker dispersal would likely be negligible.

Land Tenure

- Acquisition of the **40-acre** private inholding would extend BLM protection measures to one site supporting Enter's groundsel. Reduced recreational use of this area would result if water developments were removed, reducing potential impacts to the Enter's groundsel site.

Minerals

- Withdrawal of the ACEC from locatable minerals and removal of the possibility for mineral sales would protect special status plants and their habitats from these potential disturbances.

Livestock Grazing

- Removal of livestock grazing from the Leslie Gulch pasture would eliminate all threats to special status plants associated with livestock grazing. These threats include destruction of habitat through trailing, destruction of plants by trampling and ingestion, and transport of weed seeds. The tower seral vegetative conditions of the bottom areas near the Owyhee Reservoir may improve faster under this alternative than under Alternative B or C and the vegetative niches where weeds may colonize would be reduced.

Noxious Weeds

- Careful use of both manual and chemical methods to control noxious weeds would effectively reduce the threat of habitat loss. With a botanist on site

during chemical application and chemicals to be applied to targeted plants, the likelihood of chemicals affecting special status plants would be remote.

Wild Horses

- Removal of wild horses from the ACEC through revision of the Horse Management Plan and Management Framework Plan would reduce the potential for impacts to special status plants, such as trampling of habitat and weed dispersal. Within the last five years, no wild horses have been observed in the ACEC, and consequently no impacts of wild horses to special status plants have been observed. The potential for wild horse use in the area currently exists because the boundary of the ACEC is not fenced and the area is administratively open to wild horse use.

Special Status Plants

- Addition of the gate in lower Dago Gulch would benefit special status plants by reducing the opportunity for vehicle traffic to pass over the plant sites adjacent to the Dago Gulch Road.

Wildlife

- Since bighorn sheep were part of the coexisting flora and fauna of the area prior to stabilized human settlements, maintenance of a viable herd of bighorn sheep is considered compatible with special status plant management. No studies documenting use of bighorns on Owyhee clover have been conducted, and the interrelationship between the two species is not known, but it is likely that bighorns do eat the clover. There are no documented impacts by the bighorn or other wildlife on the special status plant species in the ACEC.

Recreation

- Increased recreational use in the ACEC would increase the potential for impacting special status plants and plant habitat. Direct impacts include disturbance to individual plants and their habitat. Indirect effects include dissemination of exotic weed seeds at Slocum Creek campground and in hiking corridors. **Alternative A** and **D** would have less recreational impact than Alternatives B or C.
- Removal of the Back Country Byway and Watchable Wildlife designations would reduce an increased potential for recreational impacts to

special status plants by possibly reducing the rate of increased recreational use in the ACEC.

- If determined necessary, development of site-specific signs or trail segments which would route hikers around special status plant sites would reduce impacts to these sites.
- Eliminating recreational horse use would reduce dissemination of weed seeds through hay and animal transport. Seed dissemination would remain a concern during administrative use of horses in the ACEC. Impacts of horses on fragile soils and special status plant habitat also would be eliminated.
- Instituting a back country access permit system would allow controls to be placed on the amount and location of recreational use. Such a permit system would lessen potential recreational impacts on special status plants and their habitat.
- Establishment of an Cwyhee Breaks trailhead at an existing vehicle pullout/parking area would have no impact on special status plants or their habitat.
- Limiting Special Recreational Use Permits to a maximum party size of six persons would aid in the avoidance of special status plant habitat.
- Installation of a toilet and parking area at Dago Gulch or optionally at upper Leslie Gulch would not impact special status plants at these locations.
- Expanding parking facilities at the boat launch area and providing a waste disposal for river floaters would not affect special status plants or their habitat. Any increased ACEC use resulting from the development of these outside and water-based facilities may have a negligible impact on special status plants or their habitat.

Monitoring Needs

- The five candidate plant species identified in Leslie Gulch would be monitored for maintenance of habitat and existence of viable populations.
- The two annual species, Enter's groundsel and Packard's *mentzelia*, require monitoring several times annually due to population fluctuations caused by climate changes and uncertain seed bank dynamics. Disturbances to their habitat and invasion by exotic species are of particular concern.

- Plant demographics of the perennial species would yield information about the natural population dynamics of these three species.
- A monitoring plan for the special status plant species will be incorporated into the final ACEC Management Plan, taking into account impacts from recreational use, wild horses, mining activity, grazing, and noxious weed encroachment.

Wildlife

Factors Which Influence Management Prescriptions

Bureau policy states that candidate species such as California bighorn sheep will be treated as priority species in all land use plans. Management direction provided by the MFP was to manage the habitats of special status wildlife species in a manner that would favor their perpetuation **and/or** expansion, to provide forage for big game, and to assure that land use authorizations perpetuate or enhance existing habitat characteristics of critical wildlife use areas. The Northern Malheur MFP also recommended bighorn sheep reintroduction and the Southern Malheur EIS Preferred Alternative had provisions for sheep transplants.

The Leslie Gulch Habitat Management Plan (HMP) for California bighorn sheep includes the Leslie Gulch ACEC area. Through the HMP, one bighorn sheep water development and fence modification for bighorn passage has been completed in the ACEC. Future maintenance may be necessary on those projects. Reclamation of Steamboat Ridge Trail was a planned HMP action that has not been implemented.

Like other reintroduced herds of California bighorn sheep, this population seems to be self-limiting in numbers. One factor that may limit the herd is the bighorn sheep **lungworm**, an endemic organism that passes from the ewe to the unborn lamb and causes mortality in young animals. In the past, the Oregon Department of Fish and Wildlife (ODFW) placed wormer blocks in the ACEC for bighorn sheep use. Due to the abundant naturally occurring **salts** in the area, the blocks were not used by the **bighorns** and were removed. A different type of wormer may be used in the future.

Management actions that could influence the quality of bighorn sheep habitat in Leslie Gulch include the number of roads, range condition, amount of human

disturbance, presence or absence of domestic sheep, mineral development, and water availability.

Because most historic California bighorn range has been degraded by human use, it is unlikely that enough herds can be established to remove the species from consideration for listing under the Endangered Species Act. If a catastrophic event occurs, such as an epidemic disease, the likelihood of species survival increases with the number of populations. In addition, the Leslie Gulch herd is among a few in Oregon large enough to serve as a source for transplanting to other areas. These factors make the Leslie Gulch ACEC regionally and nationally significant for California bighorn sheep **habitat**. Protection of those values is necessary to maintain a healthy herd and contribute to protection of the species.

Bighorn sheep are captured periodically by ODFW for relocation to unoccupied ranges. This removal of animals also avoids the stagnation of the Leslie Gulch herd. Expansion of the herd to new habitat without manual relocation has been special status. In 1988, the Malheur County Bighorn Sheep Reintroduction Plan and Memorandum of Understanding (MOU) was signed by BLM Vale District and ODFW. Reasonable numbers for the Leslie Gulch bighorn herd unit were established at 250 to 300 animals, and capture and release of bighorn sheep was also authorized.

Capture involves the use of a helicopter, trailers and other base camp equipment for two days, usually in the winter. Only two captures, in 1986 and 1988, have been conducted in Leslie Gulch ACEC. Past activity was based at Slocum Creek campground, but actual capture activity was outside the ACEC boundary. Helicopters are also used by ODFW for bighorn inventories in January and June, with landings for refueling usually occurring at the Overlook.

Bald eagles, listed as threatened under the Endangered Species Act, winter along the **Owyhee** River but have no known roost sites such as large cottonwoods within the ACEC. No site specific information is presently available.

Townsend's big-eared bat populations are declining seriously in Oregon and elsewhere. Less than 2800 individuals are estimated to remain in Oregon. The most important habitat factor seems to be undisturbed roost, nursery, and winter hibernating sites, which are often found in caves. When those sites are disturbed, bats burn critical fat reserves. No site specific information on this species is available.

Mojave black-collared lizards are associated with boulders or rockpiles on arid slopes. This species is considered sensitive because of its restricted distribution. Bureau policy is to treat Bureau Sensitive species the same as federal candidate species. The western ground snake, a BLM tracking species, is difficult to inventory because of its secretive, nocturnal habits. The few specimens found in Oregon have been located at the foot of rocky slopes.

Impacts Of Alternatives On Wildlife

Alternative A

Access and Roads

- Road closure on Steamboat Ridge would benefit California bighorn sheep, mule deer, and Rocky Mountain elk, since there would be less disturbance through human activity.
- Road closure would make wildlife surveys more difficult for ODFW to accomplish.

Land Tenure

- Acquisition or a scenic easement of the private inholding would prevent further development, habitat degradation, and disturbances to wildlife at Mud Spring.
- In the short term, site rehabilitation would disturb bighorn sheep and other wildlife. Removal of the present development would have a long-term beneficial effect by returning the site to native habitat and reducing the likelihood of camping near Mud Spring.

Minerals

- Wildlife habitat would be maintained within the area withdrawn from mineral activity. If the rest of the ACEC is not withdrawn through wilderness designation, adverse impacts could occur from locatable mineral development. Impacts would include habitat degradation and disturbance to wildlife. Impacts from mineral leasing would occur outside the ACEC; however, there would be impacts to wildlife species that range both inside and outside the ACEC boundaries. The severity of impacts would be dependent upon the level and location of the activity.

Livestock Grazing

- Utilization levels by livestock are presently very light, with nearly all of the cattle use on slopes less than 40 percent. Removal of livestock may improve forage quality on the lower slopes. Forage is not a limiting factor for this bighorn sheep population, so benefits would be minimal. Other wildlife species dependent on mid-to-late seral stage vegetation for forage and cover may benefit, while wildlife dependent on early seral stage vegetation may decrease in numbers within the ACEC. Removal of cattle would reduce some of the potential for noxious weed invasion and expansion of existing sites. Minimizing invasion by exotic weeds would maximize native habitat available for wildlife forage and cover.
- Fences would meet BLM guidelines for wildlife passage. There would be minimal impacts on wildlife.

Noxious Weeds

- Manual control of noxious weeds would limit introduction of exotic weed species along the roads, making native habitat used for forage and cover. Manual control alone may not be as effective at limiting weed introduction as the combination of chemical and manual methods. With no chemical control, there would be no toxic effects on small mammals, reptiles, or other wildlife.
- Cleaning of road maintenance equipment for removal of weed seeds would benefit wildlife by maintaining available native habitat.

Wild Horses

- No impacts to wildlife are known due to recent wild horse use. Removal of the ACEC from the HMA would eliminate the potential for any future impacts.

Special Status Plants

- By limiting vehicle access, the gate at Dago Gulch would limit potential disturbance of wildlife.

Wildlife

- Limiting base operations would not prevent ODFW from carrying out needed bighorn management. Occasional removal of animals for transplant would maintain the health of the bighorn sheep herd. Operations could be less efficient and the

animals subjected to slightly more stress when being moved by helicopter. Wormer blocks or other supplements would also be available for use if deemed necessary by ODFW. There should be no effects on other wildlife species from bighorn sheep management activities.

Fire

- Protection from fire would benefit special status species and other wildlife by minimizing loss of habitat. Surface disturbance from earthmoving equipment could create site-specific negative impacts to Mojave black-collared lizards, western ground snakes and other wildlife species with restricted ranges.

Recreation

- Fewer visitors would be expected under this alternative than under Alternatives Bor C due to less recreation development and curtailment of present uses. This reduced visitation should be beneficial to wildlife since there would be fewer wildlife-human contacts and less ground disturbance. Elimination of recreational horse use would reduce the potential for invasion by new exotic weed species and expansion of current exotic weed species into native wildlife habitat.
- Developed recreation would be limited to Slocum Creek campground and the boat ramp area, which are already disturbed. Elimination of camping sites at Dago Gulch would reduce visitor contacts with bighorns and other wildlife at Mud Spring. To a lesser extent, impacts may occur from day use parking and restrooms.

Alternative B (No Action)

Access and Roads

- Leaving Steamboat Ridge Road open would result in continued disturbance of California bighorn sheep, mule deer, and Rocky Mountain elk at current or higher levels.
- Wildlife surveys by ODFW would continue unimpeded.

Land Tenure

- If the private inholding were not acquired, visitor use of the Mud Spring area would likely increase. This use would result in more disturbance to bighorn sheep and other wildlife using the spring.

With the land remaining in private ownership there would be potential for further development which would degrade wildlife habitat and increased disturbance to wildlife at Mud Spring.

Minerals

- Withdrawal from locatable mineral activity would benefit bighorn sheep and other wildlife species by reducing the potential of disturbance to habitat. Impacts from mineral leasing would occur outside the ACEC; however, there would be impacts to wildlife species that range both inside and outside the ACEC boundaries. The severity of impacts would be dependent upon the level and location of the activity.

Livestock Grazing

- Continuing existing livestock management may cause accessible slopes to remain in early seral vegetation for a longer time than under Alternatives A and C. Wildlife forage quality for species dependent on mid to late seral stages may recover more slowly which may have negative impact on wildlife species dependent on middle to late seral stage vegetation for forage and cover. The bighorn sheep population would not be affected, since forage is not a limiting factor in the ACEC. The potential for increased weed invasion from livestock would continue, which could reduce the amount of available forage and cover for wildlife.

Noxious Weeds

- While the site-specific, limited use of herbicides could cause short-term moderate toxic effects in small mammals and reptiles, the treated areas would be so restricted that impacts should be minimal. The habitat improvement achieved by removing undesirable vegetation would off set any negative impact.

Wild Horses

- Any wild horses that move into the ACEC would increase grazing pressure, especially on the lower slopes. Since horses prefer late seral stage vegetation and will use steeper slopes than cattle, there would be more dietary overlap and competition with bighorn sheep. However, since forage is not a limiting factor for this bighorn sheep population, impacts would be minimal. Ecological site conditions on the lower slopes would remain in early seral stages, while those areas in mid-to-late seral stages could decline under increased grazing

pressure. Wildlife forage quality and quantity would be reduced.

Special Status Plants

- Continuation of present special status plant species management would not affect wildlife.

Wildlife

- Occasional removal of animals for transplant would maintain the health of the bighorn sheep herd. There should be no effects on other wildlife species from bighorn management activities.

Fire

- Protection from fire would benefit special status species and other wildlife by minimizing loss of habitat. Surface disturbance from earthmoving equipment could create site-specific negative impacts to Mojave black-collared lizards, western ground snakes and other wildlife species with restricted ranges.

Recreation

- Minimal control on visitor use could result in major impacts to wildlife species as the number of visitors increase. Potential impacts include increased surface disturbance, increased harassment and visitor contacts, and new and further invasion of weedy species by spreading seeds and soil disturbances into native habitat.
- Rock climbing activities at the Einstein climbing site **could** cause some disturbance of rubble and boulders near the bottom of the slopes. This disturbance **could** impact on Mojave black-collared lizard and western ground snake habitat, but any impact would be minimal and localized.

Alternative C

Access and Roads

- Leaving Steamboat Ridge Road open would result in continued disturbance of California bighorn sheep, mule deer and Rocky Mountain elk at current or higher levels.
- Wildlife surveys conducted by ODFW would continue unimpeded.

Land Tenure

- Acquisition or a scenic easement of the private inholding would prevent further development, habitat degradation, and disturbances to wildlife at Mud Spring.
- Piping the water from Mud Spring for human use off-site would have a short-term impact from construction noise and disturbance. In the long term, bighorn sheep and other wildlife should benefit at Mud Spring from the reduction in disturbance and encounters with people. By providing potable water at Slocum Creek, more visitors would be attracted to the ACEC with the associated increase of impacts to all wildlife.

Minerals

- Locatable mineral activity would disturb both wildlife habitat and wildlife species. Impacts from mineral leasing would occur outside the ACEC; however, there would be impacts to wildlife species that range both inside and outside the ACEC boundaries. The severity of impacts would be dependent on the level and location of the activity.

Livestock Grazing

- Changing the grazing period to winter use may improve forage quality for some species of wildlife. Winter grazing removes only dormant grass material and does not deplete the carbohydrate reserves of the plants allowing grasses to achieve their maximum potential for increase in size, vigor and productivity. Wildlife species dependent on mid-to-late seral stage vegetation for forage and wver should benefit. Wildlife dependent on early seral stage vegetation **could** have reduced habitat within the ACEC. Forage is not a limiting factor for this bighorn sheep population, so benefits to **bighorns** would be minimal.

Noxious Weeds

- The site-specific use of herbicides **could** cause short-term moderate toxic effects in small mammals and reptiles; however, the treated areas would be so restricted that impacts should be minimal. The positive impact of improving habitat by removing undesirable vegetation is far greater than any potential negative impacts.
- Weed-free hay would limit the spread of exotic plant species, including noxious weeds, into native wildlife habitat. However, enforcement would be

difficult and some spread of weeds is likely from horse use, since weed seeds can be carried in digestive tracts for several days.

Wild Horses

- Any wild horses that move into the ACEC would increase grazing pressure, especially on the lower slopes. Since horses prefer late seral stage vegetation and will use steeper slopes than cattle, there would be more dietary overlap and competition with bighorn sheep. However, since forage is not a limiting factor for this bighorn sheep population, impacts would be minimal. Ecological site conditions on the lower slopes would remain in early seral stages, while those areas in mid-to-late seral stages **could** decline under increased grazing pressure. Wildlife forage quality and quantity would be reduced.

Special Status Plant Species

- The use of **exclosure** fences to protect special status plant sites would not impact wildlife.
- The gate in lower Dago Gulch would reduce impacts to wildlife from vehicles using the lower 0.8 mile of the road.

Wildlife

- Occasional removal of animals for transplant would maintain the **health** of the bighorn sheep herd. There should be no effects on other wildlife species from bighorn sheep management activities.

Fire

- Protection from fire would benefit special status species and other wildlife by minimizing loss of habitat. Surface disturbance from earthmoving equipment **could** create site-specific negative impacts to Mojave black-collared lizards, western ground snakes and other wildlife species with restricted ranges.

Recreation

- Under this alternative the rate of day-use visitation and overnight camping would increase, making disturbances and harassment of wildlife more likely to occur. Increased development would also reduce habitat for species such as non-game migratory birds and herptofauna such as the Mojave black-collared lizard.

- Rock climbing activities at all of the existing sites could disturb rubble and boulders near the bottom of the slopes. Impacts on Mojave black-collared lizard and western ground snake habitat would be minimal and localized. There would be continued disturbance to any raptors, bighorn sheep lambing areas, and bat roosting sites near the existing climbing routes.

Alternative D (Preferred Alternative)

Access and Roads

- Leaving Steamboat Ridge Road open would result in continued disturbance of California bighorn sheep; mule deer, and Rocky Mountain elk at current levels.
- Wildlife surveys conducted by ODFW would continue unimpeded.

Land Tenure

- Acquisition or an easement of the private inholding may prevent further development, habitat degradation, and disturbances to wildlife at Mud Spring.
- In the short term, site rehabilitation would disturb bighorn sheep and other wildlife. Removal of the present development would have a long-term beneficial effect by returning the site to native habitat and reducing the likelihood of camping near Mud Spring.

Minerals

- Withdrawal from **locatable** mineral activity would benefit California bighorn sheep and other wildlife species by reducing the potential of disturbance to habitat. Impacts from mineral leasing would occur outside the ACEC; however, there would be impacts to wildlife species that range both inside and outside the ACEC boundaries. The severity of impacts would be dependent on the level and location of the activity.

Livestock Grazing

- Utilization levels by livestock are presently very light, with nearly all of the cattle use on slopes less than 40 percent. Removal of livestock may improve forage quality on the lower slopes. Forage is not a limiting factor for this bighorn sheep population, so benefits may be minimal. Other wildlife species dependent on mid-to-late seral

stage vegetation for forage and cover should benefit, while wildlife dependent on early **seral** stage vegetation may decrease in numbers within the ACEC. Removal of cattle would reduce some of the potential for noxious weed invasion and expansion of existing sites. Minimizing invasion by exotic weeds would maximize native habitat available for wildlife forage and cover.

- Fences would meet BLM guidelines for wildlife passage. There would be **minimal** impacts on wildlife.

Noxious Weeds

- While the site-specific, limited use of herbicides could cause short-term moderate toxic effects in small mammals and reptiles, the treated areas would be so restricted and treatment controlled so that impacts should be minimal. The habitat improvement achieved by removing undesirable vegetation would off set any negative impacts.
- Cleaning of road maintenance equipment for removal of weed seeds would benefit wildlife by maintaining available native habitat.

Wild Horses

- No impacts to wildlife are known due to recent wild horse use. Removal of the ACEC from the HMA would eliminate the potential for any future impacts.

Special Status Plants

- The use of **exclosure** fences to protect special status plant sites would not impact wildlife.
- By limiting vehicle access, the gate at Dago Gulch would limit potential disturbance of wildlife.

Wildlife

- Limiting base operations would not prevent ODFW from carrying out needed bighorn management. Occasional removal of animals for transplant would maintain the health of the bighorn sheep herd. If any sites other than Slocum Creek campground are needed for efficient transplant operations and are approved by BLM, there would be mitigation for any potential impacts to wildlife. Wormer blocks or other supplements would also be available for use if deemed necessary by ODFW. There should be no effects on other wildlife species from bighorn sheep management activities.

Fire

- Protection from fire would benefit special status species and other wildlife by minimizing loss of habitat. Surface disturbance from earthmoving equipment could create site-specific negative impacts to Mojave black-collared lizards, western ground snakes and other wildlife species with restricted ranges.

Recreation

- Fewer visitors would be expected under this alternative than under Alternatives B or C due to less recreation development and curtailment of some present uses. This reduced visitation should be beneficial to wildlife since there would be fewer wildlife-human contacts and less ground disturbance. Elimination of recreational horse use would reduce the potential for invasion by new exotic weed species and expansion of current exotic weed species into native wildlife habitat.
- Developed recreation would be limited to Slocum Creek campground and the boat ramp area, which are already disturbed. Elimination of camping sites at Dago Gulch would reduce visitor contacts with bighorns and other wildlife at Mud Spring. To a lesser extent, impacts may occur from day use parking and restrooms.
- The picnic area near the boat ramp would disturb additional wildlife habitat. The small area disturbed should have minimal impacts on wildlife.
- Rock climbing activities at the Einstein climbing site could cause some disturbance of rubble and boulders near the bottom of the slopes. This disturbance could impact on Mojave black-collared lizard and western ground snake habitat, but any impact would be minimal and localized.

Monitoring Needs

- Annual aerial monitoring of California bighorn sheep and mule deer populations by ODFW will continue.
- Annual monitoring of mule deer and upland gamebirds by ODFW will continue.
- Baseline information for bald eagle winter use, presence and distribution of special status wildlife species, and **raptor** nesting in the ACEC will be gathered.

Fire

Factors Which Influence Management Prescriptions

The Vale District Fire Management Activity Plan establishes guidelines for selecting fire suppression methods for individual fires within the district. These guidelines consider resource conflicts of the various methods available and the severity of burning conditions. Under the plan, fire suppression personnel must consider the trade-offs between impacts to other resources of the area and the effectiveness of selected fire control measures. Full fire suppression efforts, which include crawler tractor-constructed fire lines, may not be appropriate in areas such as Leslie Gulch where impacts to the visual resource are of primary concern. The Interim Policy and Guidance for Lands Under Wilderness Review specifies that fire control methods be selected which are most effective while being least damaging to wilderness values. These constraints apply only to the Wilderness Study Area portions of the ACEC. No earth moving equipment may be utilized in any identified special status Plant site or archaeological sites.

Fire suppression on public lands often is required to prevent fire from spreading to adjacent lands. The private owner of the lands to the south of Leslie Gulch uses these lands for livestock grazing. Fire which spreads from the public lands can destroy privately-owned forage and range developments and the federal government could be held liable for damages if less than full suppression measures are implemented.

The Interim Policy and Guidance for Lands Under Wilderness Review also sets policy for revegetation activities within Wilderness Study Areas. This policy states that to the extent feasible, emergency seeding and planting will utilize native species and that the use of mechanized cross country travel will be avoided.

Impacts Of Alternatives On Fire

Alternative A

Access and Roads

- Closure of the Steamboat Ridge Road would eliminate this route for access to this area by fire suppression personnel.

Livestock Grazing

- With no cattle to consume annual grass production, there would be a slight increase in fine fuels during the fire season. Since large portions of the ACEC are either not used by livestock or are inaccessible and many natural fire breaks exist within the ACEC, there is not expected to be a significant change to the fire hazard within the ACEC due to changes in livestock grazing.

Recreation

- Restricting campfires to developed campgrounds and prohibiting back country camping would remove these potential sources of fire from the ACEC and reduce fire hazard.

Alternative B (No Action)

Access and Roads

- All existing roads would remain available for access by fire suppression personnel.

Livestock Grazing

- Permitting grazing in March and April would reduce the accumulation of fine fuels in areas where cattle graze. Since grazing occurs early in the growing season, any grass growth occurring after livestock removal remains available for fire fuel during the late summer fire season.

Recreation

- Permitting unrestricted camping and use of campfires throughout the ACEC would increase the risks of fire starting from these activities.

Alternative C

Access and Roads

- All existing roads would remain available for access by fire suppression personnel.

Livestock Grazing

- Changing the season of livestock grazing to the winter months would reduce the effect that cattle have in reducing accumulation of fine fuels. Since grazing would not occur during the growing season, more fine fuels would be available to burn during the late summer fire season. Since large portions of the ACEC are either not used by

livestock or are inaccessible and many natural fire breaks exist within the ACEC, there is not expected to be a significant change to the fire hazard within the ACEC due to changes in livestock grazing.

Recreation

- Prohibiting ground fires outside of developed campgrounds would reduce the potential for wildfires. This alternative would have the same risk of fire starts by recreationists as Alternative A and have less risk than Alternative B.

Alternative (Preferred Alternative)

Access and Roads

- All existing roads would remain available for access by fire suppression personnel.

Livestock Grazing

- With no cattle to consume annual grass production, there would be a slight increase in fine fuels during the fire season. Since large portions of the ACEC are either not used by livestock or are inaccessible and many natural fire breaks exist within the ACEC, there is not expected to be a significant change to the fire hazard within the ACEC due to changes in livestock grazing.

Recreation

- Restricting campfires to developed campgrounds and prohibiting back country camping would remove these potential sources of fire from the ACEC and reduce fire hazard.

Monitoring Needs

- Monitor impacts of fire and fire suppression activities until all disturbances are stabilized by vegetation. In Leslie Gulch, impacts to the Relevant and Important Values are primarily considered; but also analysis of impacts to all resources of the area are also analyzed. Fire personnel are used as available to monitor rehabilitation of burned areas and identify locations where remedial work is necessary.

Cultural Resources

Factors Which influence Management Prescriptions

No systematic cultural resource inventories have been conducted within the Leslie Gulch ACEC boundaries. One prehistoric site has been identified and recorded, but its eligibility for the National Register of Historic Places has not yet been determined. Extensive cultural resource inventories have been conducted upriver from the Leslie Gulch area. The Owyhee River, tributary canyons and adjacent uplands are known to have been intensively and extensively utilized by Native Americans.

No systematic paleontological inventories have been conducted within the Leslie Gulch ACEC boundaries. A single tooth of unknown significance has been identified in the ACEC area.

Known cultural resources would be evaluated to determine the property's eligibility to the National Register of Historic Places. Any ground-disturbing activities or management actions which have the potential for concentrating use requires a Class III cultural resource inventory, evaluation of property significance and monitoring in accordance with the National Historic Preservation Act, the Archaeological Resources Protection Act and 36 CFR 800.

Impacts Of Alternatives On Cultural Resources

Alternative A

Management activities which would affect cultural resources may be authorized after the effect of those activities has been evaluated and any required mitigation measures have been implemented to adequately protect cultural resources.

Alternative B (No Action)

Management activities which would affect cultural resources may be authorized after the effect of those activities has been evaluated and any required mitigation measures have been implemented to adequately protect cultural resources.

Alternative C

Management activities which would affect cultural resources may be authorized after the effect of those

activities has been evaluated and any required mitigation measures have been implemented to adequately protect cultural resources.

Alternative D (Preferred Alternative)

Management activities which would affect cultural resources may be authorized after the effect of those activities has been evaluated any any required mitigation measures have been implemented to adequately protect cultural resources.

Recreation

Factors Which Influence Management Prescriptions

The diverse nature of the recreational opportunities available in Leslie Gulch has a significant role in the area's management. While remaining relatively unknown, the area's popularity is increasing. In recent years, the area has received media attention in various regional and national publications. BLM's wilderness review process has also attracted public interest to the area.

The quality of a visitor's recreation experience in a particular activity is affected by a combination of environmental and personal factors. Environmental factors can include the level and type of development, condition of the area's resources, user conflicts, and extent of managerial presence (e.g., signs and patrols). Each visitor also has a unique set of personal values (e.g., preferences, expectations, and tolerances) which also affects his or her experience when recreating in the area.

Existing management direction for recreation in the area is provided in the Northern Malheur Management Framework Plan (MFP) and in the Interim Management Policy and Guidelines for Lands under Wilderness Review (IMP).

The MFP provides for legal motorized access with an off-highway vehicle (OHV) limited use designation which restricts vehicle use to the existing Leslie Gulch, Dago Gulch and Steamboat Ridge roads. Development of trail heads, trails, the boat ramp, sanitation facilities, campgrounds/picnic areas; VRM Class II management; and managerial signing and dispersed recreational use are also provided for in the MFP. Under BLM's Recreation 2000 initiative, the Leslie Gulch area is a part of the Owyhee River Complex Special Recreation Management Area.

The purpose of the IMP is to retain or enhance existing wilderness values which qualify the WSAs suitable for preservation as wilderness. These values include naturalness, outstanding opportunities for solitude, and primitive and unconfined recreation.

Management actions should not exceed the management objective for the VRM Class II designation. Any developments proposed for the ACEC must consider their potential effects upon the visual character of the area.

Through a Memorandum of Understanding with the Bureau of Reclamation (BOR), the BLM manages the BOR parcel located between the ACEC and the Owyhee Reservoir. The type and extent of developed recreational facilities on this parcel concur with the MFP decision to provide boating access in Leslie Gulch. These facilities were developed in partnership with Malheur County and the Oregon Department of Parks and Recreation to provide recreation uses not otherwise available in the Leslie Gulch area. The presence and use of these facilities affects recreation opportunities within the ACEC. Presently there is no docking facility to provide safety for the boating public. The knoll adjacent to the boat ramp is subject to increased vegetation and soil damage by day use visitors of the area.

Leslie Gulch is a component of BLM's National Watchable Wildlife and National Back Country Byways programs. Byways are established to provide opportunities for the public to enjoy America's public lands which are removed from major highway systems. Watchable Wildlife areas are managed to provide wildlife viewing opportunities for the public. Both programs promote the area in widely circulated promotional mediums. The State of Oregon has nominated the Byway as one of its original Scenic Tour Loops, a new program designed to promote motorized travelers' enjoyment of the state's natural and cultural resources and to enhance tourism.

Sport rock climbing has recently expanded within the ACEC and specific management guidance regarding this activity has yet to be developed in the BLM. In the Vale District, there is a moratorium on the placement of fixed anchors and the use of portable power tools in WSAs until additional management direction is developed. Rock climbing can impact recreation by affecting the area's scenic resources, cultural values, wilderness values, soils and vegetation.

Impacts Of Alternatives On Recreation

All Alternatives

The Memorandum of Understanding with the BOR would provide for continued on-site BLM management of federal lands for recreational purposes where Leslie Gulch confluences with Owyhee Reservoir. Visitors would continue to have the opportunity to use the recreational facilities, on BOR lands.

Visitor safety and resource values would be enhanced by retention of the gate at the Overlook for temporary closure. If the gate were closed, there would be a short-term loss of recreation opportunity.

Signs would be designed to be minimal in scope and to blend with the setting while providing appropriate protection of resources and enhancing the public's visit to the area.

Providing for the physically challenged at selected developed facilities would enhance the recreation opportunities for a larger segment of the public.

Shooting restrictions in areas of concentrated use would provide a measure of safety for the visiting public.

The management actions affecting rock climbing activities would restrict opportunities for rock climbers. There would be fewer impacts to the natural and visual values, which would enhance enjoyment of the ACEC by other recreational users.

Public lands outside of the ACEC would remain available for overnight camping.

Alternative A

Access and Roads

- Two additional pullout/parking areas along the Leslie Gulch Road would decrease driving hazards by keeping parked vehicles off the traveled road. Improved access to areas of the ACEC where there is currently no parking would reduce impacts to resources at the currently heavier used areas and increase use in other areas. Visitors' primitive recreation experiences would be enhanced by improved distribution of use and a decrease in the number of party contacts.

- Elimination of vehicular access on Steamboat Ridge would preclude use by recreationists who drive this particular route. Vehicle trespass in the three WSAs would be reduced.
- By not improving the Leslie Gulch channel crossings, current road standards would continue to discourage some visitation, particularly by low clearance vehicles. Occasional flood damage of the crossings would continue to occur, temporarily preventing road access and possibly stranding visitors.

Land Tenure

- Acquisition of the 40-acre private parcel at Dago Gulch would provide for the establishment of a day use parking area and a restroom in that area. These facilities would reduce vehicle congestion and place a restroom closer to where back country recreational use originates in this part of the ACEC. Reclamation of the existing developments on this parcel and careful design of the new facilities would reduce the overall visual impacts on the setting.
- Non-availability of developed water at Mud Spring would reduce the attractiveness of the ACEC for camping.

Minerals

- Exploration or development of locatable minerals, where available in the ACEC, could adversely impact the scenic qualities of the ACEC and likely not meet VRM Class II objectives. All recreational activities would be adversely impacted should mineral activities occur. Any mining claims staked within the WSAs would be subject to a validity examination prior to development activity following designation as wilderness. Valid claims would have the basic rights for development granted under the Mining Law of 1872.

Livestock Grazing

- Removal of livestock from the ACEC would enhance the quality of the recreation experience for those visitors who dislike the presence of livestock or their evidence. There would be less human-induced alteration from livestock use activities on the natural setting within the ACEC.

Noxious Weeds

- Manual removal of noxious weeds would help maintain the area's natural appearance, but would

not be as effective at controlling weeds as Alternatives B, C and D, which have a combination of manual and chemical control methods.

Wild Horses

- Although there has been no recent wild horse use, excluding the Leslie Gulch area from the Wild Horse Management Area would eliminate the chances that visitors would observe wild horses.

Special Status Plants

- Any fences, signs or trail segments constructed to protect special status plant sites would create a visual intrusion but would not significantly affect most recreational activities.
- Installation of a gate on the Dago Gulch Road would limit vehicle access on approximately 0.8 mile of a dead-end road and reduce motorized vehicle trespass in the Upper Leslie Gulch and **Slocum Creek WSAs**, and eliminate the need to turn around at hazardous points along the road.

Recreation

- Elimination of the Back Country Byway and Watchable Wildlife designations would reduce public awareness of the **ACEC's** values, and the opportunity for public education available through these programs would be lost. Although recreational use of the Leslie Gulch area is expected to increase in the future, the rate of increase would likely be less under this alternative.
- This alternative would be the least attractive for vehicle campers at Slocum Creek campground since there would be no additional development. Boat loading/unloading would remain a safety hazard with no safety dock provided. The lack of developed picnic units near the boat ramp would promote increased proliferation of trails on unstable slopes, damage to vegetation and the scattering of trash. No provision for a human waste facility would encourage continued dumping on public lands and cause maintenance **difficulties** in vault toilets due to plastics dumped with the waste.
- The **Owyhee Breaks** trail corridor would not be available to direct users to a preferred route location, possibly causing a proliferation of primitive trail routes and impacts to resources.
- Opportunities for recreational horse use in the area would not be available.

- Impacts on natural values and higher levels of social contact between users due to back country camping would not occur. This would retain the back country in a more natural condition and enhance the quality of a primitive recreation experience for day users in the area.
- Permits limiting organized group size to six persons would result in less impact to natural values and lessen social impacts between parties, in the back country.
- Prohibiting sport rock climbing within the ACEC would eliminate visual impacts caused by fixed anchors or chalked and artificially constructed handholds, site-specific soil compaction, and vegetative disturbance. Some visual scarring of the rock faces may remain evident due to removal of existing anchors, particularly at the Einstein site. Potential impacts to known cultural resources caused by rock climbing activities would be avoided.

Alternative B (No Action)

Access and Roads

- No additional pullout/parking areas along the Leslie Gulch Road would preclude the opportunity to improve safety along the road and to improve the distribution of dispersed recreation activities within the ACEC. This could lead to a lower quality primitive recreation experience for visitors as use levels increase in more popular back country areas.
- With vehicle access to Steamboat Ridge and Dago Gulch remaining open, the potential for unauthorized vehicle use in the three **WSAs** would continue.
- By not improving the Leslie Gulch channel crossings, current road standards would continue to discourage some visitation, particularly by low clearance vehicles. Occasional severe flood damage of the crossings would continue to occur, temporarily preventing road access and possibly stranding visitor

Land Tenure

- With no acquisition of the private parcel or scenic easement at Dago Gulch, the possibility of development of day use facilities and reduction of visual impacts by the existing structures would be

foregone. Any additional developments by the landowner would likely further impact the high scenic values located in the setting of the ACEC.

- Public use of water from Mud Spring would be at the discretion of the private landowner.

Minerals

- Withdrawal of locatable minerals throughout the ACEC would help protect the ACEC's existing natural landscape and high scenic qualities from disturbance. This closure would enhance the recreational experiences dependent upon these values.

Livestock Grazing

- The presence of livestock during the beginning of the high recreational use period (March and April) would impact some recreational activities by intruding upon the natural setting. Livestock presence or evidence may degrade the desired recreation experience for some visitors.

Noxious Weeds

- The combination of manual and chemical control of noxious weeds would likely result in fewer weeds in the area than under Alternative A, aiding in maintaining the area's natural appearance.

Wild Horses

- Allowing wild horses into the ACEC would provide the opportunity for visitors to see wild horses in a natural setting. The impact on an individual's recreational experience from this opportunity would depend on personal perceptions.

Special Status Plants

- Possible site-specific measures, including public education and fence or sign placement to protect plant sites, may enhance visitors' awareness, respect and interest about the area's unique plants and their habitat.
- Any fences, signs or trail segments constructed to protect special status plant sites would create a visual intrusion but would not significantly affect most recreational activities.
- With the lower 0.8 mile of Dago Gulch Road being open, OHV trespass would continue in Upper Leslie Gulch and Slocum Creek **WSAs**. Motorists would continue to turn around at hazardous locations on this dead end road.

Recreation

- Maintaining the Back Country Byway and Watchable Wildlife management programs in the ACEC would likely increase the rate of the area's recreational use, but would serve the important role of public education and information dissemination about resource values and user ethics.
- Developing individual camp units within the presently disturbed area at the Slocum Creek campground would enhance camping opportunities there. However, this level of campground development would not help meet peak season camping demands for the area. Boat loading/unloading would remain a safety hazard with no safety dock provided. The lack of developed picnic units near the boat ramp would promote increased proliferation of trails on unstable slopes, damage to vegetation and the scattering of trash.
- Continued vehicle camping at dispersed locations in the ACEC, primarily in Dago Gulch, would continue to cause damage to vegetation, soils and aesthetic values and increase vehicle trespass into **WSAs**.
- Recreational horse riding would continue on primitive trails and may cause establishment of additional trails and spread weed seeds throughout the area. Fragile soils and special status plant habitat may be disturbed.
- The Owyhee Breaks trail corridor would not be available to direct recreationists to a preferred route location. Proliferation of primitive trail routes and impacts to resources may occur.
- With the continuation of uncontrolled back country camping, there would be increased frequency of contacts between back country users and long term evidence of campsites. This would reduce the sense of solitude and quality of a primitive recreation experience. Continued damage to vegetation for use in camp fires and proliferation of fire rings would continue.
- Not placing restrictions on the size of organized group activities would cause more intense and accelerated impacts on natural values. Social conflicts with other recreationists could also be more apparent. Adding special stipulations to activities which require a special use permit would partially mitigate the impacts.

- Sport rock climbing at the Einstein climbing site using fixed anchors would cause visual impacts from the use of fixed hardware, artificially created hand holds and white chalk deposits on the rock faces. There would also be impacts upon other resources by the concentration of activity at the climbing site. The climbing routes would not be visible from the access road, therefore, disruption to the high quality scenery would not occur for motorists. The climb routes and activities would be visible to other back country recreationists in the Upper Leslie Gulch WSA. Climbing activities at the Asylum site would impact the visually sensitive natural setting viewed by motorists along the ACEC's main canyon road. Mitigative measures to avoid impacts on known cultural resources in a climbing area may be necessary, but would likely not preclude climbing.

Alternative C

Access and Roads

- Development of four pullout/parking areas along the Leslie Gulch and Dago Gulch roads would improve safety and access to additional areas of the ACEC. This would reduce user pressure and impacts on those back country areas with existing parking.
- With vehicle access to Steamboat Ridge remaining open, the potential would remain for vehicle trespass into the Honeycombs WSA. Vehicle access to Steamboat Ridge would remain.
- Proposed drainage crossing improvements under this alternative would slightly improve accessibility of the ACEC. These improvements **would** allow the crossings to pass larger storm runoff events without becoming impassable. This would reduce the chances that visitors would become stranded in the gulch during storms. Although all types of highway vehicles presently use the road, these improvements **would** make the ACEC slightly more attractive to visitors, which **could** result in slightly increased use.

Land Tenure

- Acquisition of the **40-acre** private parcel at Dago Gulch would provide for the establishment of a day use parking area and restroom in that area. These developments would reduce vehicle congestion and place a restroom closer to where back country recreational use originates in this part of the ACEC. Reclamation of the existing developments

on this parcel and careful design of the **new** facilities would reduce the overall visual impacts on the setting.

- Piped potable water to Slocum Creek campground from Mud Spring would increase camping pressure at Slocum Creek. Water development, combined with the campground expansion, would increase the number of visitors as well as the length of stay of campers.

Minerals

- Exploration for or development of locatable minerals in the ACEC could adversely impact the exceptional scenic qualities of the ACEC, which are an important and relevant value. Mineral extraction activities would likely not meet visual management objectives for the designated VRM Class II area of the ACEC. The quality of a recreation experience for most recreation opportunities in the ACEC would likely be substantially adversely impacted and diminished by certain mineral exploration methods and by all forms of mineral extraction activities.
- **Although** IMP guidance precludes nearly all mineral development activities, mining claims can still be located. Any mining claims staked within the **WSAs** would be subject to a validity examination prior to development activity following designation as wilderness. Valid claims would have the basic rights for development granted under the Mining Law of 1872.

Livestock Grazing

- Changing the livestock grazing season in the Leslie Gulch pasture to winter use would separate the cattle use period from the primary recreational use season. Recreational visitors may still view some indirect evidence of livestock use but to a lesser extent than under Alternative B.

Noxious Weeds

- The combination of manual and chemical control of noxious weeds would likely result in fewer weeds in the area than under Alternative A, which would help maintain the area's natural appearance.

Wild Horses

- Wild horses may move into the ACEC, presenting an opportunity for visitors to see wild horses. The impact on an individual's recreational experience

from this opportunity would depend on personal perceptions.

Special Status Plants

- Any fences, signs or trail segments constructed to protect special status plant sites would create a visual intrusion but would not significantly affect most recreational activities.
- A back country visitor access permit system would help limit impacts on special status plants.
- installation of a gate on the Dago Gulch road would limit vehicle access on approximately 0.8 mile of dead-end road up Dago Gulch, reduce vehicle trespass in the Upper Leslie Gulch and **Slocum Creek WSAs** and eliminate a hazardous vehicle turn around point on the dead-end road.
- Possible site specific measures, including public education, signing and fence placement, to protect plant sites, may enhance visitors' awareness, respect and interest about the area's unique plants and their habitat.

Recreation

- Maintaining the Back Country Byway and Watchable Wildlife designations in the ACEC would likely increase the rate of the area's recreational use, but would serve the important role of public education and information dissemination about resource values and user ethics.
- The on-site availability of potable water, development of individual camp units and the improvements at the boat ramp area proposed under this alternative would increase the level of camping use within the ACEC and provide safety for the boating public and picnic tables while protecting vegetation and soil adjacent to the boat ramp outside of the **ACEC**.
- Providing equestrians with a vehicle campsite at Dago Gulch would separate their overnight activities from Slocum Creek campground users, reducing user conflicts.
- The requirement for horse users to provide **weed-free** hay would be an inconvenience for recreational horse users.
- Physical impacts due to recreational horse use would be confined to roads and accessible ridge

tops under this alternative, largely avoiding special status plant habitats. Significant increases of horse use for recreational riding could cause excessive damage to sensitive and steep soil sites and vegetation, as well as cause some user conflicts.

- With motorized vehicle access to Steamboat Ridge remaining open, violations of off -road driving would continue to occur into Honeycombs WSA.
- The frequency of back country user contacts would likely be greatest under this alternative, diminishing the quality of the primitive recreation experience.
- Providing for the Owyhee Breaks trail corridor and creating a trailhead would direct users to a preferred route, reducing impacts to sensitive resources.
- Unrestricted sizes of organized group activities would cause increased impacts on resource values. Social conflicts with other recreationists would be more apparent. Adding special stipulations to activities which require a special use permit would partially mitigate these impacts.
- Retaining all existing sport rock climbing routes would continue to cause visual impacts due to fixed hardware, artificially created hand holds and white chalk deposits on the rock faces; and impacts upon other resources such as soil compaction and vegetation damage caused by the concentration of climbing activity. Limiting the number of persons and frequency of use at the climbing sites would reduce the impacts more than under Alternative B. Climbing routes within view of the Leslie Gulch Road would disrupt sightseeing within the area for motorists. Mitigative measures to avoid impacts on known cultural resources in a climbing area may be necessary, but would likely not preclude climbing.

Alternative D (Preferred Alternative)

Access and Roads

- Development of up to four pullout/parking areas along Leslie Gulch and Dago Gulch would improve road driving safety and access to additional areas of the ACEC. This would reduce user pressure and impacts on those back country areas with existing parking.
- With vehicle access to Steamboat Ridge remaining open, the potential would remain for vehicle

trespass into the Honeycombs WSA. Access would also remain for hunting and other uses.

- Proposed drainage crossing improvements under this alternative would slightly improve accessibility of the ACEC. These improvements would allow the crossings to pass larger storm runoff events without becoming impassable. This would reduce the chances that visitors would become stranded in the gulch during storms. Although all types of highway vehicles presently use the road, these improvements would make the ACEC slightly more attractive to visitors, which could result in slightly increased use.

Land Tenure

- Acquisition of the **40-acre** private parcel at Dago Gulch would provide for the establishment of a day use parking area and a restroom in the Dago Gulch area. These facilities would reduce vehicle congestion, decrease vehicle trespass into **WSAs**, and improve sanitation by placing a restroom closer to where back country recreational use originates in this part of the ACEC. Reclamation of the existing developments on this parcel and careful design of the new facilities would reduce the overall visual impacts on the setting.
- Non-availability of developed water at Mud Spring or elsewhere would somewhat reduce the attractiveness of the ACEC for camping.

Minerals

- Elimination of mineral activity throughout the ACEC would help protect the ACEC's existing natural landscape and high scenic qualities from disturbance. Recreational experiences dependent upon these values would be enhanced.

Livestock Grazing

- Removal of livestock from the Leslie Gulch pasture would enhance the quality of the recreation experience for those visitors who dislike the presence of livestock or their evidence. There would be no new livestock trails, no grazed appearance, no livestock and no livestock sign to alter the natural setting within the ACEC.

Noxious Weeds

- The combination of manual and chemical control of noxious weeds would likely result in fewer weeds in the area than under Alternative A, aiding in maintaining the area's natural appearance.

Wild Horses

- Although there has been no recent wild horse use, excluding the Leslie Gulch area from the Wild Horse Management Area would eliminate the chances that visitors would observe wild horses.

Special Status Plants

- Any fences, signs or trail segments constructed to protect special status plant sites would create a visual intrusion but would not significantly affect most recreational activities.
- Installation of a gate on the Dago Gulch Road would limit vehicle access on approximately 0.8 mile of a dead-end road and reduce motorized vehicle trespass in the Upper Leslie Gulch and Slocum Creek **WSAs**, and prevent hazardous turn around driving on the dead-end road.

Recreation

- Elimination of the Back Country Byway and Watchable Wildlife designations would reduce public awareness of the ACEC's values, and the opportunity for public education available through these programs would be lost. Although recreational use of the Leslie Gulch area is expected to increase in the future, the amount of increased use would likely be somewhat less under this alternative. The level of adverse impacts on natural values and frequency of social impacts between visitors would be somewhat less.
- Opportunities for recreational horse use in the area would not be available.
- Impacts on natural values and higher levels of social contact between users due to back country camping would not occur. This would retain the back country in a more natural condition and enhance the quality of a primitive recreation experience for day users in the area.
- nv activities requiring a special use permit which normally limits group size to a maximum of six persons would result in less impact to natural values and less social contact between groups within the ACEC.
- Developing individual camp units within the presently disturbed area at the Slocum Creek campground would enhance camping opportunities there. However, this level of campground development would not help meet peak season camping demands for the area. The

safety dock would help provide protection for visitors and their watercraft, designed for loading/unloading only. Providing up to three picnic tables on the knoll adjacent to the boat ramp would curtail haphazard damage to vegetation and soil while minimally providing for this recreational activity.

- Sport rock climbing using fixed anchors at the Einstein climbing site would cause visual impacts from the use of fixed hardware, artificially created hand holds and white chalk deposits on the rock faces. There would also be impacts upon other resources by the concentration of activity at the climbing site. The climbing routes would not be visible from the access road; therefore, disruption to the high quality scenery would not occur for motorists. The climb routes and activities would be visible to other back country recreationists in the Upper Leslie Gulch WSA. Impacts would eventually be less apparent as climbing routes are removed once they become unsafe. Sport rock climbing would eventually no longer be available in the ACEC. In the short term, any required mitigation to protect known cultural resource values in a climbing area would likely not preclude rock climbing activities. Over the long term, rockclimbing impacts to known cultural resources would be fully avoided.
- Providing for the Owyhee Breaks trail corridor and creating a trailhead would direct users to a preferred route, reducing impacts to sensitive resources.
- Provision of a human waste dump facility for river floaters would prevent illegal dumping on public lands and eliminate maintenance problems of vault toilets in the ACEC.
- Providing temporary housing at Slocum Creek **campground** would provide for more efficient monitoring of activities and public contact services for the public.

Monitoring Needs

- Maintain vehicle counts of use, particularly during the primary recreational use period (April through October).
- Conduct studies to determine where and to what extent various recreational activities are occurring within the ACEC, emphasizing water-oriented, developed facility and back country dispersed recreational activities.

- Establish baseline data for indicators of condition (current and desired) and measures of human induced recreational impacts on natural and cultural values, focusing on areas where use is more concentrated and where more sensitive resources may be affected.
- Establish measures for retaining or enhancing quality of recreation experience, while minimizing conflicts between various recreation uses and users.

Wilderness

Factors Which Influence Management Prescriptions

The 1989 BLM Oregon Final Wilderness EIS and subsequent 1991 **BLM Oregon Wilderness Study Report** to the President recommended nearly all of the three **WSAs** within the ACEC be designated as components of the National Wilderness Preservation System. In 1992, the President submitted to Congress the same recommendation. Congress has no deadline to make a decision on the wilderness issue. WSA land within the ACEC not recommended for wilderness designation are at two locations: 1) the width of the lower Leslie Gulch canyon floor, not to exceed 400 feet from either side of the Leslie Gulch Road, from the private land at Mud Spring down canyon to the Bureau of Reclamation-administered land and 2) the width of the Slocum Creek canyon floor extending for 1,200 feet south from the Slocum Creek campground area.

There is substantial public support for wilderness designation of the **WSAs**.

While in study status, the three wilderness study areas within the Leslie Gulch ACEC are managed in accordance with **BLM's** Interim Management Policy and Guidelines for Lands under Wilderness Review (IMP) (BLM Manual Handbook 8550-I) and Instruction Memorandum OR-92-241, "Interim Management of Wilderness Study Areas". In general, the only activities allowed under these guidelines are temporary uses that create no new surface disturbance. Allowing for noted exceptions, proposed surface disturbing management actions within **WSAs** which would require reclamation **could** not be implemented until Congress removes an area from WSA status. Regarding noted exceptions, any proposed new surface disturbing action (such as pullout/parking areas, developed trails, road stabilization work, restrooms, fences or signs) are assessed to determine if the action meets the IMP by

providing for one or more of the following: 1) the action is the minimum necessary to protect or enhance wilderness values; 2) the action provides the minimum necessary facilities for public enjoyment of the wilderness values; and/or 3) the action is necessary for public health and safety in the use and enjoyment of the public lands' wilderness values. Implementation of any surface disturbing action within a WSA must be substantiated by appropriate monitoring. Monitoring results must show that the impacts on wilderness values requires a project's implementation as a minimum action to protect or enhance the wilderness resources or their uses.

The IMP states that livestock grazing activities, mining, and mineral leasing uses on lands under wilderness review may continue in the manner and degree in which these uses were being done on October 21, 1976. These are "grandfathered" uses. Livestock grazing is grandfathered in all three WSAs. There are no grandfathered mining claims or mineral leases within the WSAs of the Leslie Gulch ACEC.

Activities that do not impair the land's suitability as wilderness or those that protect or enhance wilderness values are permitted in WSAs. The IMP requires separate analysis of impacts for the exceptions of use or surface-disturbing activities to ensure that wilderness values are not so impaired as to make a WSA not suitable for wilderness designation. New permanent structures, installations or trails are permitted if needed to preserve wilderness and resource values or provide the minimum necessary for public health and safety in the use and enjoyment of the public lands wilderness values. Maintenance, construction or removal of existing structures and installations are permitted if accomplished by primitive means. New permanent range improvements may be approved for the purpose of enhancing wilderness values by better protecting the rangeland in a natural condition.

Land use authorizations such as leases and special use permits may be permitted if BLM determines that wilderness values would not be impaired. Changes in livestock use are allowed if the changes do not cause declining condition or trend of the vegetation or the soil. Noxious weeds may be controlled by grubbing or chemicals if there is no effective alternative and there are no serious adverse impacts on wilderness values.

The IMP provides for land exchanges when BLM receives lands within an area under wilderness review in exchange for public lands not under wilderness review. BLM's wilderness

recommendation for each of the three WSAs of the ACEC did not recommend acquisition of the 40-acre private parcel.

Any portions of the WSAs that are congressionally designated as wilderness would be managed in accordance with BLM's Wilderness Management Policy Title 43 CFR 8560 and BLM Manual 8560, Management of Designated Wilderness Areas. A wilderness management plan would be developed for any designated wilderness area. All issues and needs to specifically manage the wilderness area(s) would be addressed in the plan. Appropriate decisions of this plan would be included in the wilderness management plan.

Impacts Of Alternatives On Wilderness

'Alternative A

Access and Roads

- Construction of two pullout/parking areas along Leslie Gulch Road would provide safe parking for persons going into the Slocum Creek or Honeycombs WSAs, enhancing the opportunity to enjoy wilderness values. Overall, primitive recreation opportunities in WSAs would be enhanced by decreasing the number of party contacts with the greater distribution of use.
- Closing motorized vehicle access on Steamboat Ridge and on about 0.8 mile of the Dago Gulch Road would prevent unauthorized off -road vehicle use into the three WSAs and enhance primitive recreation opportunities in these WSAs.

Land Tenure

- Acquisition of the 40-acre private parcel at Dago Gulch would allow for consistent management of wilderness values including outstanding natural scenic values, bighorn sheep habitat and Ertter's grouse specimens and habitat. Removal of the structures and reclamation of the area north of the Leslie Gulch Road would eliminate these visual intrusions. Proposed parking area and restroom in Dago Gulch would be designed to have a lower visual impact than the existing developments.

Minerals

- Closure to mineral material sales throughout the ACEC would protect wilderness values of the

ACEC from disturbances associated with this type of mineral resource development. Locatable minerals development would likely impair wilderness values and not meet VRM Class II objectives.

- The 1035 acre locatable mineral withdrawal, proposed under this alternative, includes those portions of the **WSAs** not recommended for wilderness designation and the remainder of the ACEC which is outside of the **WSAs**. Without withdrawal, these areas would be available for mineral development which could severely impact wilderness values within adjacent designated wilderness areas. Any congressional legislation for designated wilderness within the ACEC would likely withdraw the designated wilderness from mineral entry. However, for any mining claims established prior to designated wilderness, surface disturbing mining activities on claims with a valid mineral discovery within designated wilderness **could** be authorized. Mining activities within designated wilderness would likely severely impact wilderness values.

Livestock Grazing

- Elimination of livestock grazing, livestock trails, and the grazed appearance in livestock use locations within the three **WSAs** would reduce the human-induced alteration of the naturalness within the three **WSAs**.

Noxious Weeds

- Manual control of noxious weeds would help preserve the naturalness of the three **WSAs**, but this method alone would be less effective than the **combination** of methods proposed in Alternatives B, C and D.

Wild Horses

- Removal of wild horses **would** have limited effect on wilderness values because there is minimal **wild** horse use in the ACEC.

Special Status Plants

- Constructing site specific trails or fences or placing signs in **WSAs** to protect special status plant sites would serve as the least surface disturbing activities to protect these important wilderness values. Fence construction would likely cause more visual intrusion on the naturalness of a **WSA** than small segments of trail construction or the

placement of signs, thus, should be done as a last resort to protect site specific special status plants.

Wildlife

- Current bighorn sheep transplant practices have not impaired wilderness values. The presence of bighorn sheep wormer blocks or other supplements in public use areas within **WSAs** would create an undesirable littered appearance. Placement in less apparent locations would reduce impact on wilderness values.

Recreation

- There would be fewer impacts on wilderness values by recreationists under this alternative than under **Alternatives B and C**, and about the same impacts as under Alternative D. Recreational use would be directed to fewer specific locations in **each of the three WSAs** than under Alternative C in order to enhance opportunities for solitude and primitive recreation.

- Recreational use impacts would be more dispersed and less acute in high use areas than under Alternative B. The extent of these impacts would be partially mitigated by the lower level of recreational facility development and improvements prescribed under this **alternative** and by the limitation to day use hiking for access within the **WSA** portions of the ACEC. Possible implementation of a back country use permit system would increase opportunities for recreationists to experience solitude and a quality primitive recreation experience while aiding the protection of wilderness natural values.

- The naturalness of the **WSAs** would be most protected under this alternative by closure of two road segments, development of a parking area at Dago Gulch which would centralize parking for both Dago Gulch and upper Leslie Gulch, improved dispersal of **WSA** recreational use by establishing two additional **pullout/parking** areas along the main Leslie Gulch Road and by limited special use permit activities.

- Not providing for the Owyhee Breaks trail corridor **could** result in a proliferation of trails established by repeated use within the **WSAs**, particularly in the Honeycombs and Slocum Creek **WSAs**. The opportunity to manage this type of recreational use would be foregone.
- Removal of fixed anchors associated with sport rock climbing in the **WSAs** would be in accordance

with the IMP policy of not permitting the establishment of permanent installations within **WSAs**. At the Einstein climbing site, the removal of fixed anchors would likely cause more observable scars than leaving the existing camouflaged hardware on the rock face and providing maintenance. Potential impacts on cultural resource values caused by rockclimbing activities would be avoided.

Alternative B (No Action)

Access and Roads

- With no additional pullout/parking provided in the ACEC, the opportunity to improve the WSA visitors' safety while using the access road, and the opportunity to improve the distribution of use in the **WSAs** would be foregone, resulting in higher concentrations of use in WSA locations where parking along the road presently occurs. Within **WSAs**, there would be a long term deterioration of a quality primitive recreation experience, fewer opportunities for outstanding solitude, and increased physical impacts to resources in the existing concentrated use areas. Visitors to the lesser-used areas in **WSAs** would more likely retain opportunities for outstanding solitude with fewer contacts with other back country users.
- With no change in motorized vehicle access routes, a total of approximately 1.5 miles of existing road would remain available for use in the ACEC, compared to Alternative A. Off-road vehicle use would likely continue into Honeycombs WSA from the Steamboat Ridge Road, and along the Dago Gulch Road into Upper Leslie Gulch and Slocum Creek **WSAs**. Along steep grades of Steamboat Ridge Road, soil erosion from surface water runoff would be a continued concern.

Land Tenure

- Without acquisition of the Dago Gulch **40-acre** private parcel, opportunities to remove the visual impacts of the structures would be foregone.

Minerals

- The withdrawal of locatable minerals from the entire ACEC now would be a significant step in protecting wilderness values. The **WSAs** are currently open for location of mining claims while in the study process. However, should mining claims be established prior to designated wilderness, surface disturbing mining activities on

the claims with a valid mineral discovery within any designated wilderness could be authorized, Mineral development on areas designated wilderness would likely have significant impacts on wilderness values.

Livestock Grazing

- The presence of livestock and the evidence of livestock use (trails, fecal material and grazed areas) in **WSAs** and designated wilderness may reduce the enjoyment of some visitors seeking primitive recreation activities. Livestock impacts to wilderness natural values, such as to special status plants or their habitats, hinders efforts to protect such values.

Noxious Weeds

- The combination of manual and chemical control of noxious weeds would be more effective than manual control alone in reducing the impacts of noxious weed invasion on the natural setting of the **WSAs**.

Wild Horses

- Wild horse use within the ACEC is minimal so has limited effect on wilderness values. Depending upon the specific locations and level of the wild horse use, impacts could be similar to those described for livestock under this alternative. The presence of wild horses can have positive or negative impacts for WSA visitors depending upon their personal perceptions.

Special Status Plants

- Under current management direction and guidance, site-specific measures may be implemented to protect special status plant species or other wilderness values. Measures such as signing, fencing, and trail relocation may be approved as the least impacting activities to a **WSA's** naturalness, should monitoring determine such actions to be necessary to protect or enhance wilderness values and wilderness values are not unduly impaired. Constructing site specific trails or fences or placing signs in **WSAs** to protect special status plant sites would serve as the least surface disturbing activities to protect these important wilderness values. Fence construction would likely cause more visual intrusion than trail segment construction or the placement of signs, thus, should be done as a last resort to protect site specific special status plants. This alternative may

require an increased degree of protective measures than required under Alternative A or D due to the retention of livestock grazing.

Wildlife

- The current bighorn sheep transplant practices have not impaired wilderness values. The presence of bighorn sheep wormer blocks or other supplements in public use areas within **WSAs** would create an undesirable littered appearance. Placement in less apparent locations would reduce impact on wilderness values.

Recreation

- Vehicle access on the Steamboat Ridge and Dago **Gulch** roads would perpetuate unauthorized off-road vehicle use in the three **WSAs**. Not providing for the Owyhee Breaks trail use corridor would likely lead to a proliferation of trails and **inadvertant** impacts to other resources caused by repetitive passage of recreational users in the **WSAs**.
- There would be fewer specific opportunities to manage various recreation uses in **WSAs** under this alternative and less opportunity to direct increased dispersed use to other locations within the **WSAs**.
- Recreational use impacts would be more concentrated and acute in specific locations of the three **WSAs** than under Alternatives A or C or D, since no additional pullout/parking areas would be provided. As back country visitation increases within the ACEC, some wilderness values in the presently accessible locations of the **WSAs** would be more severely impacted. There would be a greater deterioration of outstanding opportunities for solitude as the frequency of party contacts increases in these locations. Organized group use activities would intensify certain physical impacts in the **WSAs** during concentrated group activities.
- Long term retention of fixed anchors for sport rock climbing, as permanent installations, in **WSAs** would not be in accordance with the IMP. Limiting sport rock climbing to Einstein and employing mitigative measures would be more effective in this alternative than under Alternative C. While anchor removal at the Asylum climbing site would **result** in some rock surface scarring, the scarring would be inconspicuous to the casual observer due to the distance from common back country use corridors within Upper Leslie Gulch WSA and the site's distance from motorists on the main Leslie Gulch Road. Mitigative measures to avoid

impacts on known **cultural** resources in one climbing area may be necessary, but would likely not preclude climbing activities.

Alternative C

Access and Roads

- Construction of four pullout/parking areas in or abutting **WSAs** within the ACEC would provide safe parking for persons going into the **WSAs**. Primitive recreation opportunities in **WSAs** would be enhanced by decreasing the number of party contacts with the greater distribution of use. In the long term, physical impacts to resources at the currently heavier-used areas in **WSAs** would be reduced, with opportunities for solitude and primitive recreation more available. Visitors to the currently lesser used areas would have reduced opportunities for outstanding solitude. Physical impacts within **WSAs** would increase in the new areas provided with parking access.

Land Tenure

- Acquisition of the **40-acre** private parcel at Dago Gulch would allow for consistent management of wilderness values associated with the area of the ACEC, including outstanding natural scenic values, bighorn sheep habitat and Enter's groundsel specimens and their habitat. Removal of the structures and reclamation of the area north of the Leslie Gulch Road would eliminate the visual intrusion. Proposed facilities of a parking area with a restroom in Dago Gulch would be designed to have a lower visual impact than the existing developments.

Minerals

- In accordance with the IMP for **WSAs**, **surface-**disturbing mining activities requiring reclamation, or which would impair wilderness values, would not be authorized. For any mining claims established prior to designated wilderness, surface disturbing mining activities on claims with a valid mineral discovery within designated wilderness **could** be authorized.
- Wilderness designation would likely withdraw approximately 85 percent of the ACEC from mineral development. However, for mining claims established prior to designated wilderness, surface disturbing mining activities on claims with a valid mineral discovery within any designated wilderness could be authorized. Mineral

development on areas either designated or not designated wilderness could have significant adverse impacts on wilderness values on any portion of the ACEC which would be **designated** wilderness.

Livestock Grazing

- The change in grazing season to the winter months would separate the presence of livestock in the **WSAs** from the visitor use season of the **WSAs**. While direct evidence of livestock use, such as trails, fecal material and grazed appearance, could be experienced by recreationists in the **WSAs**, it would likely be less noticeable than under Alternative **B**.

Noxious Weeds

- The combination of manual and chemical control of noxious weeds would be more effective than manual control alone in reducing the impacts of noxious weed invasion on the natural setting of the **WSAs**.

Wild Horses

- Wild horse use in the ACEC is minimal so has limited affect on wilderness values. Wild horses could move into the WSA under this alternative, which would provide the opportunity for visitors to see wild horses. Dependent upon the specific locations and level of the wild horse use, impacts could be similar to those described for livestock under Alternative B. The presence of wild horses can have positive or negative impacts for WSA visitors depending upon their personal perceptions.

Special Status Plants

- **The enclosure** fence for grimy ivesia would be partially within Honeycombs WSA. Although located and designed to minimize its visual presence in the WSA, there **would** be some visual impact, making the area appear less natural. Any additional fences or other measures taken to protect special status plant sites may further detract from the naturalness and scenic values. This alternative could impact wilderness values the same as Alternative B.

Wildlife

- Current bighorn sheep transplant practices have not impaired wilderness values. The presence of bighorn sheep wormer blocks or other

supplements in public use areas within **WSAs** would create an undesirable littered appearance. Placement in less apparent locations would reduce impact on wilderness values.

Recreation

- Continued motorized vehicle access on the Steamboat Ridge Road would perpetuate off -road vehicle trespass in this area of the Honeycombs WSA.
- Non-motorized primitive recreation use opportunities would be enhanced in the upper Dago Gulch areas within Upper Leslie Gulch and Slocum Creek **WSAs**. Should it be needed, a back country access permit system would enhance opportunities of solitude, primitive recreation and protection of wilderness values.
- Providing for the Owyhee Breaks trail corridor would avoid proliferation of primitive trails in Honeycombs and Slocum Creek **WSAs**.
- Recreational horse use would be more limited than under Alternative B, with impacts to the wilderness values of special status plant habitats and populations less likely to occur by riding activities. Horse use would remain a factor in the potential introduction of noxious weeds into the **WSAs**.
- The extent of developed recreation facilities, developed potable water and the opportunity to camp in the **WSAs** would invite greater use and longer recreational stays than under Alternatives A or B. This impact would be partially off set by more widely dispersing the WSA recreational use with the establishment of four pullout/parking areas along the Leslie Gulch Road. Naturalness and opportunities for solitude would be more impacted by recreational use under this alternative than under the other alternatives.
- Long term retention of fixed anchors for sport rock climbing as permanent installations in **WSAs** would not be in accordance with the IMP. The level of impact to wilderness values by rock climbing would be greatest under this alternative. Although mitigative measures would minimize each impact, the locations where climbing would be allowed would be the greater. Mitigative measures to avoid impacts on known **cultural** resources in one climbing area may be necessary, but would likely not preclude climbing activities.

Alternative D (Preferred Alternative)

Under this preferred alternative, all proposed management actions affecting **WSAs** of the ACEC meet the minimum requirements for approval under the IMP for **WSAs**. A decision to implement an approved management action within a **WSA** must assure the following: 1) the project is determined necessary and timely to protect the needs of wilderness values **and/or** is relative to visitors' health, safety **and/or** their enjoyment of the wilderness values based on results of monitoring of wilderness values and uses, and 2) the project's size, scope and design do not exceed the extent of action necessary to meet the project's purpose and needs for responsible management of wilderness values and uses.

Access and Roads

- Construction of up to four pullout/parking areas in or abutting **WSAs** of the ACEC would provide safe parking for persons hiking into the three **WSAs**. **Individual** pullout/parking areas would be developed separately only if and when monitoring indicates the need to meet the IMP requirements. Primitive recreation opportunities in **WSAs** would be enhanced by decreasing the number of party contacts with the greater distribution of use. In the long term, physical impacts to resources *at the* currently heavier-used areas would be reduced, with opportunities for solitude and primitive recreation more available. Visitors to the currently lesser used areas would have reduced opportunities for outstanding solitude, but not sufficient to impair the area's suitability to manage as wilderness. Physical impacts would increase in the new areas provided with parking access, but not sufficiently to impair the area's suitability to manage as wilderness.

Land Tenure

- Acquisition of the **40-acre** private parcel at Dago Gulch would allow for consistent management of wilderness values associated with the area of the ACEC, including outstanding natural scenic values, bighorn sheep habitat and **Erter's** groundsel specimens and habitat. Removal of the structures and reclamation of the area north of the Leslie Gulch Road would eliminate the visual intrusion. Proposed facilities which include a day use parking area with a restroom in Dago Gulch would be designed to have a lower visual impact than the existing developments.

Minerals

- The withdrawal of locatable minerals now from the entire ACEC would be a significant step in protecting wilderness values of the three **WSAs**. Surface-disturbing activities associated with salable mineral development would be considered, although environmental analysis would be required prior to any proposed sales. In accordance with the IMP for **WSAs**, surface-disturbing mining activities requiring reclamation, or which would impair wilderness values, would not be authorized. For any mining claims established prior to withdrawal or designated wilderness, surface disturbing mining activities on claims with a valid mineral discovery could be authorized. Mining activities within designated wilderness would likely severely adversely impact wilderness values.

Livestock Grazing

- Elimination of livestock grazing, livestock trails, and the grazed appearance in livestock use locations within the three **WSAs** would reduce the human-induced alteration of the naturalness within the three **WSAs**. Managing livestock trespass into **WSAs** or designated wilderness should be conducted by range riding, unless excessively repeated trespass requires the last resort of constructing fence within **WSAs** to protect or enhance wilderness values. While up to two miles of fence is identified to exclude livestock from the Leslie Gulch pasture of the ACEC, not all of the fence would be placed in **WSAs**.

Noxious Weeds

- The combination of manual and chemical control of noxious weeds would be more effective than manual control alone in reducing the impacts of noxious weed invasion on the natural setting of the **WSAs**.

Wild Horses

- Removal of wild horses would have limited effect on wilderness values because there is minimal wild horse use in the ACEC.

Special Status Plants

- Constructing site specific trail segments or fences or placing signs in **WSAs** to protect special status plant sites would impair the naturalness of a **WSA**. Fence construction would likely cause more visual intrusion than small segments of trail construction or the placement of signs, thus, should be done as

a last resort to protect site specific special status plants. The least impacting mitigative measure which meets wilderness value protection requirements would be employed on a **case-by-case** basis.

Wildlife

- Current bighorn sheep transplant practices have not impaired wilderness values. Maintaining base camp operations at already disturbed sites outside **WSAs** would aid in the protection of wilderness values. The presence of bighorn sheep wormer blocks or other supplements in public use areas within **WSAs** would create an undesirable littered appearance. Placement in **less** apparent locations would reduce impact on wilderness values.

Fire

Adequate protection of wilderness values is provided. The option of employing prescribed fire would be available to protect or enhance wilderness values.

Recreation

There would be fewer impacts on wilderness values by recreationists under this alternative than under Alternatives B and C, and about the same impacts as under Alternative A.

- Continued motorized vehicle access on the Steamboat Ridge Road would perpetuate off-road vehicle trespass in this area of the Honeycombs WSA.
- Non-motorized primitive recreation use opportunities would be enhanced in the upper Dago Gulch areas within Upper Leslie Gulch and **Slocum Creek WSAs**. Should it be needed, a back country access permit system would enhance opportunities of solitude, primitive recreation and protection of wilderness values.
- Recreational use impacts would be more dispersed and less acute in high use areas than under Alternatives B and C. The extent of impacts would be partially mitigated by the lower amount of recreational facility development and improvements prescribed under this alternative and by the limitation to day use hiking for access within the WSA portions of the ACEC. Possible implementation of a back country access permit system would increase opportunities for recreationists to experience solitude and a quality primitive recreation experience while aiding the protection of wilderness natural values.

- Limiting sport rock climbing to Einstein *and* employing mitigative measures would be more effective in this alternative than under Alternative C. While anchor removal at the Asylum climbing site would **result** in some rock surface scarring, the scarring would be inconspicuous to the casual observer due to the distance from common back country use corridors within Upper Leslie Gulch WSA and the site's distance from motorists on the Leslie Gulch Road. Eventual removal of all fixed anchors and **artificial** hand holds would comply with the IMP. During the short term, mitigative measures to avoid impacts on known **cultural** resources in one climbing area may be necessary, but would likely not preclude climbing activities. Over the long term, potential impacts on cultural resource values caused by rockclimbing activities would be avoided.

Providing for the Owyhee Breaks trail corridor and trailhead would avoid proliferation of primitive trails in Honeycombs and Slocum Creek **WSAs**.

Monitoring Needs

- Continue WSA general surveillance patrols during the primary use season (April through October), one per month minimum, and conduct aerial surveillance patrols as deemed necessary. increase frequency of patrol if use levels dictate a need.
- Monitor implementation of management actions prescribed in this plan for compliance with the IMP guidance.
- As described under Monitoring Needs for Recreation, conduct studies, determine baseline data and establish standards to monitor for retaining or enhancing opportunities for solitude and primitive, unconfined recreation, and for protecting wilderness values in **WSAs** and any Congressional designated wilderness.

Other Critical Elements

The following elements are either not present within the ACEC or are not **affected** by any of the management alternatives considered: air quality, prime and unique farmlands, flood plains, native American religious concerns, hazardous wastes, wetlands, wild and scenic rivers, riparian areas.

Public Contact and Notification

Three formal solicitations have been made for **written** input from a broad representation of **governmental** agencies, organizations and individuals via the District mailing list. A request for comments regarding issues and options to be considered in development of a management plan was sent on March 24, 1993. Following notification of intent to conduct a plan amendment and publication of the Analysis of Management Alternatives, a second request for comments was sent on September 14, 1993. The draft environmental assessment and plan amendment was distributed in December, 1993.

In addition, input was solicited from meetings in early summer, 1993, with the Vale District Multiple Use Advisory Board, Three Fingers Allotment grazing permittees, the Native Plant Society of Oregon, and a group of sport rock climbers.

Written scoping and preliminary analysis comments were received from four governmental agencies, 10 organizations, and 46 individuals from five states (Oregon, Idaho, California, Nevada, and Washington). Commentors have represented a wide variety of interests with differing goals, desires and expectations for management of Leslie Gulch. The general tone of the majority of comments indicates that the area is viewed as particularly environmentally sensitive to human activities and is worthy of having its natural beauty maintained in an undeveloped or minimally developed setting. The Relevant and Important Values for which the ACEC was designated, characteristics that many believe are deserving of protection, were reaffirmed in numerous comments.

Written wmmnts were received from the following in response to the forst two mailings:

1. Governmental Agencies

U.S. Fish and Wildlife Service, Boise Field Office
Oregon Department of Fish and Wildlife
Oregon Department of Agriculture
County Court, Malheur County

2. Organizations

The Native Plant Society of Oregon
Idaho Conservation League
The Natural Heritage Advisory Council (Oregon)
Oregon Natural Desert Association
The Nature Conservancy
Oregon Natural Heritage Program
Oregon Natural Resources Council
The Wilderness Society (Idaho)
Back Country Horsemen of America
Wilderness Watch

3. Individuals

46 individuals

The input received has been used to help identify issues to be addressed in the management plan, to help select the range of management alternatives, and to aid in development of the preferred management alternative. Several wriien comments on options not surfaced during meetings or internal review have now been incorporated for consideration and include the following:

- use of the **Overlook** for bighorn sheep gathering
- chemical control application made to individual noxious weeds only and under supervision of botanist
- purchase of the private parcel with life tenancy for the owner
- provisions made for law enforcement or supervisory needs
- potential use of prescribed fire
- introduction of special status plants into suitable habitat not currently occupied
- mineral withdrawal of all lands not in WSA status
- moving the eastern pasture boundary fence to include the entire ACEC in the Leslie Gulch pasture

Appendix III, beginning on page 21 of this document, provides responses to the public and agency comments on the December 1993 draft document.

Participating Staff

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Clair Button, Botanist, Vale District
Angel Dawson, Archaeologist, Malheur Resource Area
Randy Eyre, Range Conservationist, Malheur Resource Area
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Connie George, Engineering Draftsman, Vale District
Ralph Heft, Area Manager, Malheur Resource Area
Kathy Helm, Writer Editor, Coos Bay District
Bill Holsheimer, Geologist, Vale District
Bonnie Jakubos, Wildlife Biologist, Malheur Resource Area
Diane Pritchard, Archaeologist, Malheur Resource Area
Ken **Thacker**, Soil Conservationist, Malheur Resource Area, Team Leader

Glossary

Active Preference - That portion of the total grazing preference for which grazing use may be authorized.

Active Use - The total number of **AUMs** authorized for grazing by livestock.

Activity Plan - A document which describes management objectives, actions and projects to implement decisions of planning documents.

Allotment -An area of public land, consisting of one or more pastures, where one or more operators graze their livestock which may include parcels of state or private land. The number of livestock and season of use are stipulated for each allotment.

Alluvial Deposit - Accumulation of soil or rock material which has been transported by moving water.

Animal Unit Month (AUM) - The amount of forage required to sustain one **cow** with one calf, or their equivalent for one month.

Area of Critical Environmental Concern - An area of BLM administered lands where special management attention is needed to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and **wildlife** resource or other natural systems or processes; or to protect life and provide safety from natural hazards.

Back Country Byway - Travel routes designated and managed to provide **opportunities** for the **travelling** public to enjoy public lands which are isolated from major highway systems.

Bureau Sensitive Species - Plant or animal species eligible for federal listed, federal candidate, state listed, or state candidate (plant) status, or on List 1 in the Oregon Natural Heritage Data Base, or approved for this category by the State director.

Candidate Species - Those plants and animals included in Federal Register "Notices of Review" that are being considered by the Fish and **Wildlife** Service (FWS) for listing as threatened or endangered. There are two categories that are of primary **concern** to BLM. These are:

Category 1 Species - Taxa for which the FWS has substantial information on hand to support proposing the species for listing as threatened or endangered. Listing proposals are either

being prepared or have been delayed by higher priority listing work.

Category 2 Species - Taxa for which the FWS has information to indicate that listing is possibly appropriate. Additional information is being collected.

Carrying Capacity - The maximum number of animals an area can sustain without inducing damage to vegetation or related resources, such as soil and water.

Critical Growing Period - The portion of a plant's growing season, generally between flowering and seed ripe, when defoliation is most detrimental.

Cumulative Effect - The impact which results from identified actions when they are added to other past, present, and reasonably foreseeable future actions regardless of who undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Cultural Resources - Any definite location of past human activity identifiable through field survey, historical documentation, or oral evidence; includes archaeological sites, structures, or places, and places of traditional cultural or religious importance to specified groups whether or not represented by physical remains.

Deferred Grazing - Grazing occurs after a specified period, such as after seed ripe of key forage species.

Developed Recreation Site - A site developed with permanent facilities designed to accommodate recreation use.

Dispersed Recreation - Outdoor recreation which visitors are diffused over relatively large areas. Where facilities or developments are provided, they are primarily for access and protection of the environment rather than **comfort** or convenience of the user.

Environmental Assessment (EA) - A systematic analysis of site-specific BLM activities used to determine whether such activities have a significant effect on the quality of the human environment and whether a formal Environmental Impact Statement (EIS) is required; and to aid an agency's compliance with NEPA when no EIS is necessary.

Environmental Impact - The positive or negative, effect of any action upon a given area or resource.

Environmental Impact Statement (EIS) - A formal document to be filed with the Environmental Protection Agency that considers significant environmental impacts expected from implementation of a major federal action.

Erosion - Detachment and movement of soil or rock by water, wind, ice, or gravity.

Fixed Anchor - A small alloy device or carabineer held permanently in place on the surface of a rock wall by an expanding bolt. May be painted or unpainted with the intent of painted devices to blend with the rock color.

Grazing System - The specific way in which the amount and timing of grazing is planned for a given area.

Gully - A soil erosion channel formed by surface flowing water which has been concentrated in a narrow area. Depths can range from a few feet to as much as **100** feet.

Habitat - The place where a plant or animal naturally lives and grows.

Impact - A spatial or temporal change in the environment caused by human activity.

Impair - To diminish in value or excellence.

Inholding - Parcels of land with surface or mineral rights held privately or administered by a non-BLM agency.

Leasable Minerals - Minerals which may be leased to private interests by the federal government. Includes oil, gas, geothermal resources and coal.

Listed Species - Any species of fish, wildlife or plant which has been determined to be endangered or threatened under Section 4 of the Endangered Species Act. It is any plant or animal which is in danger of extinction throughout all or a significant part of its range. Listed **species are found in 50 CFR 17.11-17.12.**

Locatable Minerals - Minerals subject to exploration, development and disposal by staking mining claims as authorized by the Mining Law of 1872 (as amended). This includes valuable deposits of gold, silver and other uncommon minerals not subject to lease or sale.

Management Framework Plan (MFP) - A land use plan that established coordinated land use allocations for all resource and support activities for a specific land area within a BLM district. It established

objectives and constraints for each resource and support activity and provided data for consideration in program planning. This process has been replaced by the Resource Management Planning process.

Mining Claim - Portions of public lands claimed for possession of locatable mineral deposits, by locating and recording under established rules and pursuant to the 1872 Mining Law.

Mitigating Measures - Modifications of actions which (a) avoid impacts by not taking a certain action or parts of an action; (b) minimize impacts by limiting the degree or magnitude of the action and its implementation; (c) rectify impacts by repairing, rehabilitating or restoring the affected environment; (d) reduce or eliminate impacts over time by preservation and maintenance operations during the life of the action; or (e) compensate for impacts by replacing or providing substitute resources or environments.

Monitoring/Evaluation - The orderly collection and analysis of data to evaluate the progress and effectiveness of on-the-ground actions in meeting resource management objectives.

Naturalness - Refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (Wilderness Act, 1967)

Noxious Weed - A plant specified by law as being especially undesirable, troublesome and difficult to control.

Off-Highway Vehicle (OHV) - Any motorized track or wheel vehicle designed for cross country travel over natural terrain.

Off-Highway Vehicle Designation -

Open: Designated areas and trails where off-road vehicles may be operated subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343.

Limited: Designated areas and trails where off-road vehicles are subject to restrictions limiting the number or types of vehicles, date and time of use; limited to existing or designated roads and trails.

Closed: Areas and trails where the use of off-road vehicles is permanently or temporarily prohibited. Emergency use is allowed.

Outstanding - Standing out and superior among other of its kind.

Pasture - A subdivision of a grazing allotment capable of being grazed by livestock independently from the rest of the allotment.

Plan Amendment - A change in the terms, conditions or decisions of a resource management plan.

Primitive and Unconfined Recreation - Nonmotorized and undeveloped types of outdoor recreation activity.

Primitive Recreation - Characterized under the ROS by opportunity for isolation from human sights and sounds, to feel a part of the natural environment, to have high risk challenge, and to use outdoor skills in a large and essentially unmodified natural environment. User concentration is very low; evidence of other users minimal. Only facilities essential for resource protection are provided. Recreational motorized use not permitted. Activity examples include backpacking and camping, hiking, climbing, enjoyment of scenery and natural features, hunting, fishing and nonmotorized floatboating.

Raptor - Birds of prey, such as hawks, eagles and owls.

Recreation Opportunity Spectrum (ROS) -A continuum used to characterize recreation opportunities in terms of setting, activity and experience. The spectrum contains six classes: Primitive, Semi-primitive Non-motorized, Semi-primitive Motorized, **Roaded** Natural, Rural and Modern Urban.

Research Natural Area (RNA) - An area that contains natural resource values of scientific interest and is managed primarily for research and educational purposes.

Revegetation - Reestablishment of a vegetative cover on a disturbed or burned area.

Right-of-Way - A permit or an easement that authorizes the use of public lands for specified purposes, such as pipelines, roads, telephone lines, electric lines, reservoirs and the lands covered by such an easement or permit.

Rill - A small erosive feature caused by the channeling of water on slopes.

Road Prism - Across section of a constructed road which includes cutbanks, roadside ditches, road surface and fill slopes **below** the road.

Roaded Natural Recreation - A class (type) of recreation characterized under the ROS by opportunities for both motorized and nonmotorized recreational activities with site-specific facilities and controls sometimes provided for user convenience, safety and resource protection. Opportunity to have a high degree of interaction with the natural environment is available. Activity examples may include those described under Primitive Recreation, plus auto touring, interpretive use, organized campground, picnic and boating activities and motorized boating sports.

Rotational Grazing - Grazing use is subdivided into units or pastures with grazing taking place in one unit, then another, in regular succession. This rotational use can be alternated between years in a variety of grazing systems.

Salable Minerals - Minerals which may be sold or otherwise disposed of by the federal government, as authorized by the Material Sale Act of 1947. These include common varieties of stone, clay, sand, gravel, volcanic cinders, petrified rock, etc.

Scenic Quality - The relative worth of a landscape from a visual perception point of view.

Semi-Primitive Nonmotorized Recreation - Characterized under the ROS by some opportunity for isolation from human sights and sounds. Opportunity to have a high degree of interaction with the natural environment with moderate challenge and risk, and to use outdoor skills in a predominantly unmodified natural environment of moderate to large size. Concentration of users is low. Facilities are provided for the protection of resources and safety of users, only.

Soil - A natural body on the surface of the earth composed of mineral and organic materials, living forms, air and water.

Solitude - 1. The state of being alone or remote from habitations; isolation. 2. A lonely, unfrequented or secluded place.

Special Features - Features that may be present in an area under consideration for wilderness, such as ecological, geological or other features of scientific, educational, scenic or historical value.

Special Recreation Management Area (SMRA) - An area where a commitment has been made to provide specific recreation activity and experience opportunities. These areas usually require a high level of recreation investment **and/or** management. They include recreation sites but recreation sites alone do not constitute **SRMAs**.

Special Status Species - Plant or animal species falling in any of the following categories (see separate glossary definitions for each):

- Threatened or Endangered Species
- Proposed Threatened or Endangered Species
- Candidate Species
- State Listed Species
- Bureau Sensitive Species
- Bureau Assessment Species

Sport Rock Climbing - For this plan, the recreational and competitive sport of free climbing rock walls on an established climbing route without the direct assistance of artificial climbing devices. Climbers use hand/foot holds (natural or man-made) to assist climbing. Climber safety is afforded, in part, by use of ropes attached on fixed (bolted, permanently installed) anchoring devices placed into the rock surface and the use of gymnastic hand chalk. Climbing routes are graded by an international method measuring the level of climbing difficulty.

State Listed Species - Plant or animal species listed by the State of Oregon as threatened or endangered pursuant to ORS 496.004, ORS 498.026 or ORS 564.040.

Suspended Preference - The number of AUMs removed from a permittee's active preference.

Threatened Species - Any species defined through the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range and published in the Federal Register.

Total Preference - The active preference and suspended preference together make up total preference.

Unnecessary or Undue Degradation - Surface disturbance greater than what would normally result when an activity is being accomplished by a prudent operator in usual, customary and proficient operations of similar character and taking into consideration the effects of operations on other resources and land uses, including those resources and uses outside the area of operations. Failure to initiate and complete reasonable mitigation measures, including reclamation of disturbed areas, or creation of nuisance, may constitute unnecessary or undue degradation. Failure to comply with applicable environmental protection statutes and regulations thereunder will constitute unnecessary and undue degradation.

Utilization -The proportion of the current year's forage production consumed or destroyed by grazing animals. **This term may** refer to a single species or to the whole vegetative complex.

Valid Mining Claim - A mining claim staked in accordance with the provisions of the Mining Law of 1872 which has not been voided or extinguished by a federal administrative or legal action.

Validity Examination - A formal evaluation of a mining claim by a BLM geologist or mining engineer to determine the presence or absence of an economic mineral deposit.

Visual Resource Management (VRM) Classes - The inventory and planning actions to identify visual values and establish objectives for managing those values and the management actions to achieve visual management objectives.

Visual Class II Management Objective - To retain the existing character of the landscape. The level of change, overall, to the existing landscape should be low. Management activities may be seen, but should not attract attention of the casual observer. Any changes must repeat the basic visual elements of form, line, color and texture found in the predominant natural features of the characteristic landscape.

Watchable Wildlife Area -Area established and managed to provide wildlife viewing opportunities on public lands.

Wilderness Review Program - The term used to cover the entire process of wilderness inventory, study and reporting for the wilderness resource, culminating in recommendations submitted through the Secretary of the Interior and the President to Congress as to the suitability or unsuitability of each wilderness study area for inclusion in the National Wilderness Preservation System.

Wilderness Study Area (WSA) - A roadless area inventoried and found to be wilderness in character, having few human developments and providing outstanding opportunities for solitude and primitive recreation, as described in Section 603 of the Federal Land Policy and Management Act and in Section 2(c) of the Wilderness Act of 1964.

Withdrawal - A designation which restricts or closes public lands from the operation of land or mineral disposal laws.

Wormer Blocks -A medicated supplement in salt block form for treatment of internal parasites.

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Appendix I

Analysis of Factors Affecting Special Status Plant Species

I. Special Status Plants

At least five special status plant species are found in concentrated numbers in the Leslie Gulch ACEC:

1. Ertter's groundsel (*Senecio ertterae*) is an annual species, initiating growth in early spring and completing its life cycle by the end of November. Its global distribution is limited to the Leslie Gulch vicinity and to two small sites near Birch Creek, approximately 6 miles southwest of Leslie Gulch. Suitable habitat has been surveyed in the Honeycombs to the north, but only one site has been found. Little potential habitat remains to be explored for the species, and it is anticipated that at least 90% of the plant sites have been identified. Numbers of plants vary dramatically based on timing and amount of rainfall in the area.

2. Packard's blazing star (*Mentzelia packardiae*) also is an annual species, with its life cycle generally completed by late June. It grows on the same loose talus rubble as *Senecio ertterae* but only on the lower slopes and more gentle fans which spread out at the base of the talus runs. Outside of Leslie Gulch, only a single site in northern Nevada is known for this species. Very little potential habitat remains to be examined for *Mentzelia* and the likelihood of additional site discoveries is slim.

3. Grimy ivesia (*Ivesia rhypara* var. *rhypara*), a perennial herb, grows on five discrete sites in the Vale District, three of which are found in the Leslie Gulch ACEC. One other small site is known from Lake County, and two sites have been identified in northern Nevada. In spite of the fairly wide distribution, the species is extraordinarily special status. Unsuccessful inventories have attempted to locate more populations. It is restricted in our region to barren outcrops of Leslie Gulch Ash-Flow Tuff with two to three inches of rubble on top, a harsh site with little rooting depth.

4. Owyhee clover (*Trifolium owyheense*) is known from five sites in the Leslie Gulch ACEC. Sites are also known outside the area, but all are found east of the Owyhee Reservoir. Little is known about this species, and it is anticipated that more sites will be located with intensive inventory. Succulent legumes such as this are palatable to herbivores.

5. Of the special status species in the Leslie Gulch ACEC, sterile milk-vetch (*Astragalus sterilis*) is the most wide-spread geographically and in terms of known numbers and number of sites, although it is endemic to the Owyhee Region. It occupies loose ash sites of varying colors and textures. An extensive inventory for the species has been conducted east of the Owyhee Reservoir, and more sites are anticipated to be found when a similar inventory can be conducted west of the reservoir.

Ivesia is also known from one site (<1/4 acre) in Lake County, Oregon, and one population each in Washoe County (1 acre,) and Elko County, (1-2 acres) Nevada. *Mentzelia packardiae* occurs with *Ivesia* at the Elko site. All other locations for these species are in and around Leslie Gulch and the Sucker Creek Formation.

In 1991, the U.S. Fish and Wildlife Service received a petition to list *Senecio ertterae*, *Mentzelia packardiae*, *Ivesia rhypara* var. *rhypara*, and *Astragalus sterilis*. Reasons cited for the petition to list included potential impacts from cyanide heap-leach gold mining, invasion of weedy species, and the mechanical disturbance of sites due to livestock grazing. *Senecio* and *Mentzelia* are also listed by the State of Oregon as threatened.

The following below shows the federal candidate species, the number of acres of habitat in the Leslie Gulch ACEC, the total number of habitat acres for the entire species range, and the number of acres in areas used by livestock in Leslie Gulch.

Populations of several of these species are so restricted in extent that any man-caused disturbances that reduce population numbers or create opportunities for exotic weed species are a major concern for future viability of the species. In the case of the *Senecio* and *Mentzelia*, the habitat patches for each species are so close together that spread of disease or weedy competitors would be very difficult to control. With *Ivesia* and *Trifolium*, the remaining habitat patches are so small that the risk of local extinction is relatively high.

In particular, *Ivesia* is directly and immediately threatened by loss of genetic material due to death of plants because of the extremely small number of plants and area of habitat.

Both *Ivesia* and *Trifolium* appear to be palatable to animals.

Leslie Gulch Species

Species:	Fed. Stat.	State status	Global Acres Habitat	L. Gulch Acres Habitat	L. Gulch Grazed Acres
<i>Astragalus sterillis</i>	C2	C	175	50	50
<i>Senecio ertterae</i>	C1	LT	227	184	93
<i>Mentzelia packardiae</i>	c2	LT	<100	93	93
<i>Ivesia rhypara</i> var. <i>rhypara</i>	C2	C	<20*	4	4
<i>Trifolium owyheense</i>	c 2	C	<60	40**	35**

- Estimate of habitat for *Ivesia rhypara* var. *rhypara* is highly optimistic, allowing for discovery of new habitat in Nevada.
- * Estimate of habitat for *Trifolium owyheense* is based on inadequate inventory. Total after completion of further inventories will probably be closer to 120 acres.

While the remaining special status plants have survived nearly a hundred years of livestock grazing, there is no method to compare pregrazing and post-grazing populations. It is certain that large portions of the special status plant habitat have been affected to some degree and are surrounded with poor condition range sites. There appears to be suitable habitat in the vicinity which is not occupied by these species. It is not possible to determine whether any of these species were much more widespread in the past. However, they all seem to require specific soil substrates which are found only near Leslie Gulch or similar centers of volcanic activity.

II. Habitat Conditions

Ecological conditions of the upland plant communities in Leslie Gulch vary from late seral stages on the north-facing and more inaccessible slopes to early and mid seral stages, particularly near the reservoir. In the canyon bottoms near the reservoir and on some of the south-facing slopes, exotic species such as Russian thistle, cheatgrass, and woolly mullein are common. Canyon bottoms near the reservoir are generally in early seral condition, with desirable grass species such as basin wildrye, sand dropseed and needlegrass reduced to trace occurrences. Other canyon bottoms are in at least mid seral stage. Livestock forage utilization studies taken since 1985 show that recent use levels have been between 10 and 16 percent of annual production on bluebunch wheatgrass. Existing monitoring studies are not designed to determine if recent range management changes are allowing canyon bottom habitats to improve.

Senecio ertterae occurs on steep talus slopes, moderate to gentle slopes, and in canyon bottoms and washes wherever there is sufficient material of

the ash tuff gravels present. *Mentzelia packardiae* is found neatly exclusively at the base of loose talus slopes. Some of this habitat has been removed by construction of the roads in Leslie and Dago Gulchs. The lower slopes and canyon bottom habitat are crossed by numerous compacted trails which are no longer suitable habitat, and which may provide opportunities for establishment of exotic weeds. The steeper upper slopes, which are habitat for *Senecio*, but not *Mentzelia*, do not have significant signs of trailing. Recent research (1983) in Leslie Gulch and the adjacent Honeycombs indicates that the observed trails are caused by livestock which spend all of their time on slopes less than 40%, while the bighorn sheep predominately use slopes over 40%. It appears that bighorn sheep numbers are too small to cause a significant disruption of the special status plant habitat on the steeper slopes. Deer populations are also too small to have any effect.

Ivesia and *Trifolium* occur on flat to gently sloping clay sites, but there is apparently a distinct difference in the types of suitable clay substrate composition since the species do not occur together. Some habitat of both species has been destroyed by road construction. One population of *Ivesia* at the edge of the Honeycombs WSA (northeast of Leslie Gulch) has been partially destroyed by road construction associated with mining exploration, and may be affected by current mining claims. In Leslie Gulch ACEC, the primary access road cuts through one population of *Ivesia* and livestock are presently trailed through the site into and out of the pasture.

III. Factors Affecting Special Status Plants and Habitat

Impacts to special status plant species in the ACEC include potential and known effects. Destruction of

plant habitat, damage to the plants themselves, and the invasion of noxious weeds are the biggest concerns that have been identified. Soil compaction and road construction in *Senecio*, *Mentzelia*, and *Ivesia* sites are examples of habitat destruction.

...Causes of damage to the plants include herbivory on *Ivesia* and *Trifolium*, as well as trampling, breakage, and uprooting from livestock trailing through *Mentzelia*, *Senecio*, and *Ivesia* sites.

Invasion of noxious weeds presents one of the greatest threats to special status species and their habitats. Cheatgrass has become established throughout all habitat types, but is more abundant in disturbed soils and canyon bottom sites. Russian thistle is most abundant along roadsides and on disturbed soils. These species do not appear to have the ability to fully colonize and dominate the special status plant habitat. However, within the last ten years, extensive infestations of **whitetop** have become problematic in the areas east of Leslie Gulch. Cattle have been observed to ingest this species, and there is little doubt that viable seed may be transported by various animals. Vehicles may carry the seeds into the area along roads. To date, **whitetop** is found only along the road at approximately four sites in Leslie Gulch where control measures have been initiated. It is a major concern that seed may be carried to less accessible areas, where the plants **could become** well-established before control measures can **effectively** remove the infestations. Scotch thistle and **yellow** star-thistle are also of **concern** at present. These aggressive species may be able to outcompete the special status plants. Disturbed habitat along the roads is the primary avenue of weed invasion into Leslie Gulch. Livestock trails are the main source of disturbance which **could allow** the weeds to spread directly into special status plant habitat. Ungulates including cattle, horses, bighorn sheep, and deer **could spread** weeds into the special status plant habitats by carrying seeds on hooves or through their digestive tracts. Concentrated hiking and camping activity also have the potential to create disturbed, compacted soils and transport weed seeds into special status plant habitat.

Since the late **1800's**, Leslie Gulch has experienced grazing from domestic animals, both cattle and sheep. Numbers of animals and seasons of use in the canyon are unknown for the earlier years. From **1983** to 1990, there were 140 head of yearling cattle from March 1 to May 1 in the Leslie Gulch pasture of the ACEC. In **1991** and 1992, the only use was from trespass cattle. During the winter of 1992-93, trespass livestock used areas near Owyhee Reservoir, including Slocum Creek.

Wild horses were present in Leslie Gulch during the 1960's. **Although** Leslie Gulch ACEC is still **part** of a

wild horse herd management area, the wild horses generally have been using habitat north of the ACEC for the past twenty years. There are no natural or manmade barriers to prevent movement into the ACEC.

Water sources in the pasture are limited to Mud Spring, ephemeral seeps in Slocum Creek and Juniper Gulch, and at the **Owyhee** Reservoir. Because of the steepness of the canyons and the somewhat poor distribution of water in the Leslie Gulch ACEC, livestock use may be concentrated on the lower slopes and near the water sources at certain times of the year, intensifying the potential of damage to special status plant habitat from livestock trailing and bedding.

Recreational use has been concentrated near the developed campground, along roads, at the reservoir, and in areas offering rock climbing opportunities. The Slocum Creek trail is the only obvious hiking trail crossing or impacting special status plant habitat. This primary hiking access trail to the WSA was probably created by livestock, which still actively use the trail. The rock climbing areas known to be in active use do not appear to be near special status plant habitat. Recreational vehicles and horse use have the potential to create the same types of impacts as cattle, particularly if they are allowed off of the main roads. As noted above, access roads have destroyed some habitat of all four special status species, but present motor vehicle use does not appear to be causing extension of the damage.

IV. Possible Management Actions to Resolve Problems and **Conserve** Special status Species

Plant sites impacted by the main Leslie Gulch Road **could** be restored in one or two areas by outslowing the road to allow the **outwash** to pass over and form new habitat downstream of the road. This would increase the requirement for road maintenance on these sections. Closing or re-routing the public access road **could** also be considered. However, moving the road would destroy additional **habitat** in some areas. Where the road went through *Ivesia* habitat, there is no option of repair because the clay soil was cut away.

If livestock were kept off the slopes, the ash tuff talus would naturally cover the compacted trails in a few years and restore the habitat. In addition to restoring **lost** habitat, this restoration would also discourage noxious weed invasion. Compacted clay soils on the *Ivesia* habitat **could** be expected to recover more slowly. The only feasible way to keep livestock and horses off *Senecio* and *Mentzelia* habitat is to exclude them from the Leslie Gulch pasture. These

species occur in too many small patches scattered along the canyon to allow site specific **exclosures**. Fencing to protect *Ivesia* would require approximately 2.5 miles of fence and installation of one cattleguard. The alternative to installing a cattleguard would be to close **and reroute** part of the main Leslie Gulch Road, or to close it and upgrade the old access road. Without the **exclosure**, trailing damage and compaction could be reduced on the *Ivesia* habitat by trailing the livestock along the old access road.

Changing the season of use of livestock would not substantially reduce the trampling and trailing effect observed on the ash tuff habitat. Trespass livestock use in the winter resulted in concentrated use near the reservoir due to adverse weather, thereby increasing compaction on special status plant sites in Siocum Creek. Change in season of use might encourage an upward trend in species composition in poor condition range sites. A winter season of use might actually cause increased browsing on *Ivesia rhypara* since this is a perennial rather succulent species. Winter grazing use will increase utilization of sadscale, a plant that grows on the ash tuff sites occupied by *Senecio* and *Mentzelia*. In 1993, cattle actively searched for and browsed on shadscale on open slopes in winter, causing a significant degree of disturbance to the special status plants where they **it** occur in conjunction with the shadscale habitat. Repeated occurrences could result in substantial loss of special status plant habitat.

One of the most effective means of reducing the risk of spreading weeds into the special status plant habitat is to exclude livestock from the pasture. Although the area has been grazed by livestock for a hundred years, the invasion by noxious weeds is a relatively recent phenomenon.

To further reduce the risk of weeds being carried into Leslie Gulch, horse use could be banned except for administrative purposes (such as rounding up livestock). A weaker, less enforceable measure would be to require the horses be provided with weed-free hay and restricting them to road surfaces.

Modifying the wild horse herd management area boundary to exclude Leslie Gulch would remove any potential impacts of wild horse use on special status plants.

While motor vehicles **could** be banned as a means to reduce the risk to spread weeds, it is probably more appropriate to maintain aggressive weed control along the road. Banning vehicles **would** mean abandoning the road. Reclamation of the abandoned road would take a long time and provide habitat for invasion of weeds.

Dago Gulch road **could** be closed to public motor vehicle access. It dead ends at private land where there is no adequate turn-around constructed. Widening the road or constructing a turn-around at the gate would destroy habitat for *Senecio erterae*. Public vehicular traffic is presently creating minor impacts to the special status plant habitat. Alternatively, the road **could** be closed at the proposed Dago Gulch campsite.

Road maintenance activities should be carefully planned and coordinated between the botanist and engineering staff. Some modifications may be feasible to allow recovery of lost habitat, but the primary wncem is to avoid further tosses.

Dust from the road **&es** not appear to **coat** the plants. If such a problem were discovered, we **could** consider using dust control measures on the road surface on a site specific basis.

The number of campsites or users at Slocum Creek campground should be monitored and regulated if people start climbing on the nearby ash **tuff** slopes. The trail up **Slocum** Creek **could** be rerouted to avoid the best quality habitat. Another option **would** be to place interpretive signs at the campground trail access to encourage people to stay off the old trail and slopes to let them heal. However, these options would only be effective if livestock use was removed. Closing the trail completely is an option, but probably an unreasonable one since this is the best access point to the WSA from Leslie **Gulch** (access in Dago Gulch **results** in trespass).

V. Conclusions

BLM's policy is to "...ensure that actions do not contribute to the need to list..." any species as threatened or endangered (BLM Manual 6640). Several of the special status plant species in Leslie Gulch ACEC are so restricted in terms of range of occurrence, acres of habitat, and in one case, low numbers of individuals, that any factor reducing plant vigor, numbers, or available habitat may increase the **risk** of local extinction.

The best management practices for special status **plants** in Leslie Gulch include the following:

1. Restriction of the **Dago** Gulch road to public access;
2. Elimination of grazing from the Leslie Gulch pasture;
3. Mineral withdrawal;
4. Control of noxious weeds;
5. Careful road maintenance;
6. Control of recreational uses, particularly intensive campsites and use of horses.

Appendix III

Public Participation

A formal solicitation for public comment was made for the Environmental Assessment (OR-030-94-02) for the Leslie Gulch ACEC and Draft Amendment of the Northern Malheur Management Framework Plan and Draft ACEC Management Plan at the time of its publication in December, 1993. Responses to two earlier solicitations for written input were summarized in Chapter 5, entitled "Participation," of the EA/Draft Amendment/Draft Management Plan. All written comments are available for inspection at the Vale District Office.

Responses to this third solicitation for input were received from five governmental agencies, 15 organizations, and 86 individuals from four states (Oregon, Idaho, Washington and California). Some of the agencies, organizations and individuals who had responded during the earlier two comment periods again sent in comments on the EA/Draft Amendment/Draft Management Plan. Numerous letters were also received from first-time respondents.

More than seventy-five percent of the individual respondents favored some variation of Alternative D as presented in the EA. The remainder of the respondents were in favor of retaining some form of livestock grazing in the ACEC. Specific concerns were addressed by the governmental agencies, and the various organizations reflected resource management/allocation concerns of their respective constituencies. Based on the number of responses and the frequently detailed and thoughtful comments to this third mailing, it appears public interest in Leslie Gulch and its unique values remains high.

Written comments were received from the following in response to the third-mailing:

1. Governmental Agencies

U.S. Fish and Wildlife Service, Boise Field Office
Oregon Department of Fish and Wildlife
County Court, Malheur County
Bureau of Reclamation, Pacific Northwest Region
Bureau of Land Management, Boise District
Office

2. Organizations

The Native Plant Society of Oregon
Committee for Idaho's High Desert
Back Country Horsemen of Idaho

Malheur County Farm Bureau
The Nature Conservancy, LaGrande Field Office
The Nature Conservancy, Portland Office
Idaho Native Plant Society
Bureau of Mines, Intermountain Field Operations
Center
Idaho Conservation League
Wilderness Watch
Oregon Natural Resources Council
South Eugene Hiking Club
The Access. Fund
Grand Ronde Resource Council, Inc
Range Ecology Group, LaGrande

3. Individuals

86 individuals

The following numbered parts include specific questions, comments and suggestions received as a result of the December, 1993, request for input and their attendant responses:

EA Comment Responses

1. Comment: One person expressed that the use objectives in Leslie Gulch should be better defined.

Response: As stated in the Background section of the EA, the management objectives within the ACEC are to protect, conserve and enhance the Relevant and Important Values of the ACEC. All management actions are proposed with this objective in mind.

Access

2. Comment: Several comments expressed concern that the proposed gate in Dago Gulch would affect access to private lands in upper Dago Gulch.

Response: As stated in the Environmental Consequences section of the EA, the BLM recognizes the existence of the private right of way in Dago Gulch. The owners of the right of way would receive a key to the gate which would provide them the same level of access they have now.

3. Comment: Several comments were received that discussed the need for closure of Steamboat Ridge Road. Reasons cited were those addressed in the EA: erosion and trespass into the WSA. It was also suggested that Steamboat Ridge Road be closed except for administrative uses.

Response: In order to close the road for any period of time, it would be necessary to rehabilitate the steep section leading from the main Leslie Gulch Road so that tracks are not visible. Rehabilitation to that extent would be difficult. Any barriers at the bottom of the hill **could** be driven around, causing more erosion and resource damage. The proposed plan has been modified to include the following actions that minimize adverse impacts from the road: water bars will be constructed to control erosion and the area will be patrolled for OHV trespass. If monitoring indicates that unacceptable resource damage is still occurring, Steamboat Ridge Road would be closed using emergency OHV closure procedures.

4. Comment: There was a comment that ODFW needs motorized vehicle access up Dago Gulch Road for wildlife surveys.

Response: Dago Gulch Road will be open for administrative motorized vehicle use only. ODFW wildlife surveys are considered to be an administrative use.

6. Comment: A few people asked if there is a need for up to four additional parking areas, or preferred no additional pullouts be developed.

Response: There is a present need for delineating a parking area in the Dago Gulch vicinity to avoid further deterioration of roadside vegetative conditions caused by parking off of the road's edge. Currently, resource conditions and recreational use levels do not indicate a need to establish other pullout/parking sites along the Leslie Gulch Road. The provision for possible establishment of parking sites helps mitigate impacts by better distributing and directing recreational use where it is more compatible and has less impact on sensitive resource values. Additional information is found under the Roads and Access section of the proposed plan.

6. Comment: One person stated any additional pullout/parking area is contrary to the Visual Resource Management Class II management objective and may adversely affect scenic values, special status species or their habitat.

Response: Widening of the existing road width where pullouts are proposed to accommodate a few parallel parked vehicles does not exceed VRM class II objectives. A developed parking site at Dago Gulch would actually **result** in a net decrease of area with surface disturbance, compared to the extent of disturbance presently occurring by uncontrolled dispersed vehicle use at this location. Proposed

parking sites have been selected with consideration to avoid impacts on special status species and their habitat.

Land Tenure

7. Comment: Several comments were received which expressed concern that BLM acquisition of the 40 acre private parcel would reduce Malheur County revenues by removing the parcel from the tax base.

Response: The Bureau recognizes its commitment to counties in Oregon for no net gain in federal land to maintain a stable economy and county tax base. Land exchange is the preferred method of acquisition. If an exchange is not acceptable to the land owner and the land is purchased, the Bureau will, over time, balance land acquisitions with sales within Malheur County.

8. Comments: One person expressed the view that the BLM should pursue acquisition of the private lands in upper Dago Gulch. Another wanted the area of the ACEC extended to include public lands in the Spring Creek/Willow Creek area.

Response: These lands are outside the Leslie Gulch ACEC and ACEC boundary adjustments are beyond the **scope** of this management plan.

9. Comment: One person suggested that if the BLM acquires the private parcel that the cabin should be retained for public use.

Response: As stated in the Environmental Consequences section of the EA, protection of the naturalness of the wilderness study areas and the Relevant and Important value of high quality scenery dictates analyzing characteristics of adjacent lands which might conflict with these values. The existence of structures immediately adjacent to the three wilderness study areas within the otherwise mostly natural setting of the ACEC conflicts with wilderness and scenic values.

Minerals

10. Comment: Several comments were received which expressed concern that the ACEC would remain open for mineral leasing and that slant drilling techniques might impact the ACEC or adjacent wilderness.

Response: Any mineral leasing which would occur within the ACEC would be completed with a **"no surface occupancy"** stipulation. Under this stipulation

the lessee could not occupy or disturb the surface of these leases. Underground leasable mineral resources which could be accessed from land outside the ACEC could be developed under this stipulation. Fluid leasable minerals such as oil and gas or **geothermal** resources could be accessed by slant drilling techniques from outside the ACEC. Any proposed well or mine site would be analyzed for site specific conflicts with other resources at the proposed site of disturbance outside the ACEC. Under IMP guidance, drilling could not be allowed within wilderness study areas.

11. Comment: One person asked the status of mineral withdrawals on the WSA/RNA lands in the area.

Response: No mineral withdrawals have previously been proposed in this area. Minerals would most likely be withdrawn if congress were to designate any of the WSAs as wilderness.

12. Comment: One person asked why the mineral withdrawal had not been completed.

Response: BLM funding and workload requirements have not allowed for this during the past 12 years.

Livestock Grazing

13. Comment: There were several comments that there are over 400 head of bighorn sheep in the vicinity and their trails and grazing impacts have been far greater than cattle impacts in the last 14 years. It was also stated that, if cattle are removed from Leslie Gulch, then bighorn sheep should be substantially reduced or totally removed.

Response: ODFW estimated from their October, 1993, survey that there are approximately 200 bighorn sheep in the Leslie Gulch area. The Leslie Gulch herd ranges over a larger area than the ACEC. In Leslie Gulch, bighorn sheep use steeper, higher slopes than cattle (Ganskopp, 1983) and their impacts tend to be more dispersed. Bighorn sheep were native to Leslie Gulch before the introduction of domestic livestock, and are one of the Relevant and Important Values for which the ACEC was designated.

14. Comment: There was a comment that cattle should be removed from Leslie Gulch to prevent the potential spread of disease from cattle to bighorn sheep.

Response: There are no data that indicate cattle transmit disease to bighorn sheep. In a study presently being conducted at Washington State University, bighorn sheep have been put in paddocks with other wild and domestic ungulates to observe the effects on bighorns. When domestic sheep and bighorns were put together, all of the bighorns died. When cattle and bighorns were put together, there were no effects on the bighorn sheep (Dr. Bill Foreyt, personal communication). No other studies have shown that cattle have transmitted disease to bighorns (Dr. Walter Boyce, University of California at Davis, personal communication).

15. Comment: Several comments stated that cattle grazing should be removed from the entire ACEC by relocating the fence between the Bannock and Leslie Gulch Pastures so that the entire ACEC is within the Leslie Gulch Pasture.

Response: The conflicts between livestock and other resources, especially special status plants are not present in the portion of the ACEC in the Bannock Pasture. The primary rationale for excluding livestock is for protection of special status plant species and none are known to occur in this part of the ACEC. The Bannock pasture is primarily in a different watershed than the Leslie Gulch Pasture and livestock grazing would not likely have any indirect effects on the Leslie Gulch portion of the ACEC.

16. Comment: A few comments stated that the 264 AUMs currently being utilized in the Leslie Gulch Pasture should be suspended rather than be utilized in other parts of the allotment. One comment stated that additional information, including maps of pastures and WSAs, needs to be analyzed and presented regarding the use of those AUMs in other parts of the allotment. Another comment stated that moving livestock would not be in conformance with the IMP for WSAs.

Response: It needs to be clarified that utilization of the 264 AUMs in other parts of the allotment is not a shift of livestock preference. Livestock preference has been adjudicated by allotment not by pasture. A suspension of the 264 AUMs would be appropriate if it could be shown that there is not sufficient forage within the allotment to satisfy active preference or if utilizing the 264 AUMs would be significantly detrimental to other resources within the allotment. As previously stated there is sufficient forage within the balance of the Three Fingers allotment for the 264 AUMs and there would not be significant impacts to other resources. A map of the allotment including WSAs and additional information concerning the

analysis of utilizing the 264 AUMs in the rest of the allotment has been incorporated in the EA. The pastures identified for **use** (Saddle Butte, Bannock and Sulphur Spring Seeding) do not contain any **WSAs**, other **ACECs** or special management areas. There would not be an increase in grazing in any **WSA**.

17. Comment: Several comments stated that, rather than constructing a drift fence, other devices such as range riders or a sign encouraging visitors to report cattle trespass should be employed. Another comment stated that construction of a **drift fence** in the **WSA** likely conflicts with the **IMP**.

Response: As stated on page 19 of the EA, a drift fence will only be built as a last resort. Range riders will be employed to control livestock drift, and a fence would only be built if it is shown that livestock drift cannot be controlled by herding. The brochure for the **ACEC** can inform people of management practices for the **ACEC** and how to report management and visitor concerns. Should a drift fence need to be constructed in the **WSA**, it would be in compliance with the **IMP** because it would enhance wilderness values by improving protection of the rangeland in a more natural condition and would protect special status plants as an important feature within the **WSA**.

18. Comment: Several comments stated there are 948 **AUMs** available for winter grazing of livestock in the Leslie Gulch Pasture and this action should have been analyzed in more detail.

Response: Although monitoring information estimates that there may be 948 **AUMs** of forage in the Leslie Gulch Pasture, this does not automatically mean it is available for allocation to livestock. Other resource factors have to be considered before additional forage **could** be allocated to livestock. As stated on page 25 of the EA, allocation of the 948 **AUMs** of forage in the Leslie Gulch Pasture would not be consistent with **protection** of the Relevant and Important Values for which the **ACEC** was designated. Significant conflicts with other resources have been identified at the current level of grazing of 264 **AUMs**. An increase in grazing would only increase those conflicts. The alternative to utilize 264 **AUMs** with winter grazing by livestock was analyzed in detail.

19. Comment: Several comments raised the question, if grazing allotments will be reduced to make room for wild horses as a result of modifying the Three Fingers Wild Horse Herd Management

Area (**HMA**) boundary to exclude the portion that is in the **ACEC** from the **HMA**.

Response: **No** reductions to livestock are foreseen as a result of modifying the **HMA** boundary. The portion of the **HMA** in the **ACEC** has not been utilized to any extent by wild horses in the last 20 years and the boundary modification will have no effect on the present forage availability for livestock. Sufficient forage is available for wild horses in the balance of the **HMA**. Removal of the **ACEC** from the **HMA** will allow removal of **wild** horses from the **ACEC** in the future to prevent resource damage.

20. Comment: Several comments stated that in the 1960s the permittees in the Mahogany Grazing Unit (the unit from which the Three Fingers Allotment was formed) agreed to a 33 1/3 percent reduction in livestock use to restore the range and the removal of grazing from the Leslie Gulch pasture does not address the restoration of the 33 1/3 percent reduction and further reduces the potential for that restoration.

Response: As stated on page 31 of the EA the elimination of grazing from the Leslie Gulch Pasture will reduce the potential for restoration of suspended **nonuse**. Although the 1960 agreement and subsequent reduction of 33 1/3 percent is beyond the scope of this plan, BLM has been an active participant in improving range conditions in the Mahogany Grazing Unit since that time. A great deal of time and money was spent in the 1960s and 1970s on range improvements and livestock management efforts in the Mahogany Grazing Unit. The agreement referred to called for a reduction of 42.8 percent and was subsequently reduced to the 33 1/3 percent in part due to these efforts. The 1984 and 1988 decisions to break the Mahogany Grazing Unit into more manageable allotments was done in part to provide a better framework to assess and facilitate improvement to resource conditions and determine whether further restorations may be possible. Although full restoration has not taken place many benefits have accrued to the permittees in the Mahogany Grazing Unit including the fact that additional reductions have not been necessary and a significant amount of livestock use has taken place. Many of the laws and regulations under which BLM is mandated to operate have changed since 1960; while livestock grazing remains an important use of public lands, there are many additional factors that must be considered before additional allocations or restoration of suspended preference could be made to livestock. Livestock use must be balanced with other resource needs according to present resource conditions, laws and regulations.

21. Comment: Several comments stated that eliminating grazing in the Leslie Gulch Pasture would have adverse impacts on the local economy; is an excessive burden upon the permittees and the EA does not address the adverse impacts of the preferred alternative on the important historic and cultural values of livestock grazing in the area.

Response: As stated in response #15, monitoring information indicates that a reduction in grazing preference is not necessary and there will be no adverse impacts to the local economy. With no reduction in active grazing preference impacts to permittees and livestock grazing would be minor and are detailed on page 31 of the EA.

22. Comment: Several comments stated there would be no impact or conflicts with recreation if the Leslie Gulch Pasture were to be used by livestock in the winter.

Response: Page 54 of the EA acknowledges that winter grazing would lessen the impacts/conflicts with recreation associated with livestock but would not totally eliminate them.

23. Comment: One comment pointed out that the first sentence on p. 31, Alternative D, is in conflict with the p. 12 which calls for no grazing in Leslie Gulch.

Response: For clarification the narrative on page 31 has been changed from "The livestock operators would be required to alter their operations by grazing the 264 AUMs in September and October rather than during March and April." to "The livestock operators would be required to alter their operations by grazing the 264 AUMs in the 5/1 to 10/31 period in the Bannock, Sulphur Springs seeding and Saddle Butte Pastures rather than during March and April in the Leslie Gulch Pasture."

24. Comment: A few wncems were expressed that a precedent will be set, that where threatened and endangered species appear, livestock will also be removed from those areas and tax base removed from Malheur County.

Response: Each habitat supporting special status species will be evaluated on a case by case basis regarding effects of livestock on the species. Where appropriate, other techniques such as change of grazing season or small enclosures have been used to protect special status species and their habitat. There are other areas supporting special status species managed by the BLM where livestock grazing has been modified or removed; Leslie Gulch

would not be the first. Because AUMs are not cancelled but only moved to an adjacent area with the proposed decision for Leslie Gulch, no economic change would result to the Malheur County tax base.

25. Comment: A concern expressed in several letters is that there is no scientific data that cattle are adversely affecting special status plants and their habitat in Leslie Gulch: therefore, removing livestock is not justified at this time. Several letters suggested that livestock may be having a positive effect on special status plants, or no effect at all. Several letters stated that no change in livestock use should be made until appropriate studies are completed.

Response: There is no scientific data that prove cattle are adversely affecting special status plants in Leslie Gulch. However, there is no scientific data that prove cattle are not adversely affecting those special status plants, The degree of impact, should one be occurring, is also unanswered.

In order to gather the kind of data required for a definitive answer to the above questions, a series of small pastures would need to be constructed for each of the species. Timing of livestock use for several use periods and for several different intensities of use would need to be carefully controlled within those pastures to determine both season and intensity at which livestock may have an effect, either positive or negative, on survival of the species and effects on their habitat. A series of statistically sound sampling plots would need to be read over a long-term period, with data analysis and interpretation concluding the years of study.

Even if the livestock industry or BLM were willing to bear the cost in both time and dollars associated with such intensive studies for the five species, there would have to be careful analysis of the trade-offs between the potential of losing some plant populations due to the studies versus the knowledge gained that may permit authorization of several hundred AUMs in this pasture. The very studies themselves may contribute to a need to list the species. In order to evaluate whether or not grazing would promote the health of these particular plants, livestock would have to be concentrated and numerous plants grazed; again, harm may be done to the species in the course of the studies.

Also hindering the initiation of intensive studies is the WSA status of all areas where study pastures would have to be constructed. Construction of a substantial amount of fencing within a WSA is inconsistent with IMP.

The low **seral** states of the bottoms of the steep canyons, particularly in Leslie Gulch near the reservoir and Solcum Creek, show the displacement of native grasses with cheatgrass and Russian thistle, presumably due to the effects of historical **grazing**. A network of trails also crosses the special status plant habitat in several locations, particularly along the lower south-facing slopes of Slocum Creek and Leslie Gulch. These trails remain evident, even with light livestock use, and show both compaction on the trails and cheatgrass and Russian thistle at their edges. These trails also were used in the winter of **1992/93** by the trespass cattle in the pasture.

Considering the impacts to native plant communities cattle can and do make, and with forage available in the remainder of the allotment to satisfy active preference, we have chosen to err on the side of conserving the area in as natural a state as possible and to offer protection to the special status plants. By removing livestock, we have chosen to eliminate any possibility that the cattle may have an effect on the special status plants and their habitat.

26. Comment: One letter stated that we need multiple use on grazing ground.

Response: The definition of “multiple use” in the Federal Land Policy and Management Act provides for “. . . the use of some land for less than all of the resources: a combination of balanced and diverse resource uses that takes into account the long term needs of future generations for renewable and nonrenewable resources. . .” Considering the **unique** values of the ACEC, removal of grazing from the ACEC is appropriate and within the definition of “multiple use.”

27. Comment: Several comments were received stating that noxious weeds have **become** a problem only recently with light livestock use: that perhaps livestock helped control the weeds, and in any case do not contribute to a weed problem, at least not to the extent of hikers, roads, road construction and maintenance, recreational horse use, and vehicles. It was suggested that there is not a weed problem in the adjacent Honeycombs, which are grazed yearly. Several questioned whether weeds were currently found in livestock trails.

Response: Several of the noxious weeds identified in the vicinity of Leslie Gulch were not known to be **in** the area 50 years ago. In fact, the discovery of **yellow** star thistle in nearby Succor Creek was made in 1992. The focus of many studies has been on the continuing and rapid encroachment of noxious weeds throughout the West. An explosion of Scotch thistle

and **whitetop** has occurred in the areas east of Leslie Gulch in the last 20 years. They are just now moving into these steep canyon areas.

Due to the inaccessibility of the Honeycombs, no inventories of noxious weeds in those canyons have been made. Such inventories will be conducted in the next few years. Based on distributions and spread of weeds within the Vale District, it is likely that Scotch thistle and small patches of **whitetop** will be discovered in the Honeycombs.

Scotch thistle has been found in livestock trails in upper Leslie Gulch and Dago Gulch.

As has been stated in the EA, cattle may in fact be a small vector for spread of weeds. However, in the interest of conserving the special status plants and their habitat, the BLM is limiting as much as feasible any activity it authorizes which may contribute to the spread of weed seed, while retaining other limited multiple uses.

28. Comment: Several comments suggested that these species have **evolved** or wme in to the area over the last 100 years due to the niches made available for colonization from livestock grazing. In the same vein, comments also suggested that these species require disturbance to maintain population viability.

Response: Evolution to the extent exhibited by these distinct species is highly unlikely, if not impossible, in the last **100** years. The origins of these edaphic **endemics** is a matter of considerable discussion among the scientific community, and there has been **no** speculation that these species **could** be so recently derived.

Two of the special status species, Enter's groundsel and Packard's blazing star, grow on unique, exposed and virtually barren talus **tuff** which is subject to considerable movement during thunder shower and run-off events. These species are not competitive on the deeper soil types in the area and have evolved adaptations within a narrow geographic range which permit their survival on the tuff substrates peculiar to this area. There is no evidence that disturbance from herds of large ungulates was part of the flora/fauna relationships in this area during the period of evolution of these special status species. To what degree churning of soil by livestock mimics water movement disturbance is not known, but professional evaluation suggests that the two disturbances are quite different in both nature and impact to the sites.

29. Comment: Several comments noted a contradiction on Page 76 of the EA published in December, 1993, and read the statement on that page (“. . .cattle actively searched for and browsed on shadscale on open slopes in winter, causing significant degrees of disturbance to the rare plant habitat.”) to mean that livestock in fact benefited the habitat. Several letters also stated that winter grazing should have no impact on these dormant plants. A question was also asked about ingestion by livestock on all the special status plants.

Response: There is a typographical error in the above statement from Page 76. It has been corrected to read, “. . .cattle actively searched for and browsed on shadscale on open slopes in winter, causing a significant degree of disturbance to the special status plant species habitat which occurs in conjunction with the shadscale.” The meaning thus becomes clear that the winter grazing observed in 1993 caused disturbance to special status plant habitat. The intent of the paragraph is to record that concentrated disturbance to these ecosystems is made on these slopes, even with winter grazing.

Grimy ivesia remains green throughout the winter and is not totally dormant. There are no studies which evaluate whether or not this species would be grazed during the winter period. Other members of the rose family, of which this species is a part, are highly palatable. Grimy ivesia grows on two south facing, exposed, and fairly flat areas in Leslie Gulch that may have snow blown off or quickly melted in winter, thus exposing these plants more quickly to grazing than the surrounding areas.

Of the five special status plant species, only Cwyhee clover has been positively documented to be palatable to livestock, based on observations of utilization on these plants in a pasture in the Spring Mountain Allotment.

30. Comment: Many comments addressed the concern that likelihood of wildfires would be increased with elimination of grazing in Leslie Gulch.

Response: Page 49, “Alternative D, Livestock Grazing” of the December, 1993, EA addressed this concern, stating that removal of 264 AUMs is not expected to be a significant change to the fire hazard within the ACEC.

31. Comment: Several comments observed that other factors beside cattle, e.g. precipitation, soil type, and seed source, may be more important factors to plant survival than cattle.

Response: There is no doubt that many factors affect survival of special status plant species. However, one of the few factors under the control of the BLM is livestock grazing. To reiterate, BLM is choosing to err on the conservative side in Leslie Gulch and propose to eliminate all impacts that grazing by domestic ungulates may have on the species and their habitats.

32. Comment: Several comments suggested that trails are probably caused by hikers, hunters, and big game animals, as well as by livestock.

Response: Trails may be caused by a variety of uses. Unlike livestock, hikers can be directed to avoid specific special status plant habitats. By limiting camp development in the ACEC, and by removing Byway and Watchable Wildlife designations, recreational horse use and livestock use, we are seeking to limit trail formation from all human-caused activities.

33. Comment: Several comments indicated confusion regarding the statement in Appendix I which referred to observed apparent trend in Slocum Creek.

Response: The statement in Appendix I was referring to an informal procedure used to make trend assessments on upland ranges. The statement has been removed from Appendix I because no supporting documents are available in the Vale District Office to verify the observed trend. No trend plots measuring upland range trend have been established in the Leslie Gulch pasture.

34. Comment: Several letters questioned whether special status plant species numbers were decreasing or increasing in the Leslie Gulch pasture.

Response: Three photo stations established to document population fluctuations in the two annual species, Enter's groundsel and Packard's blazing star, show variable numbers of these annuals from year to year at the stations. No study plots have been established for sterile milk-vetch, Cwyhee clover or grimy ivesia; therefore, no increase or decrease in numbers for these species is known.

35. Comment: Several questions were raised regarding which range condition classes favor the special status plants.

Response: Four of the special status plant species grow on unusual substrates for which range condition ratings have not been developed. Consequently, there would be no direct correlation between seral

stages for the range sites identified in the ACEC and the special status plant sites. Cwyhee clover has been identified at some locales in more typical range sites. It is not known which range site condition class is most beneficial for survival of the clover. However, Owyhee clover evolved at a time when exotic species such as cheatgrass, Russian thistle and other noxious weeds were not part of the plant communities and did not invade disturbed areas. It would therefore appear to be favored by late seral stages or the potential natural communities where competition from exotics would be less likely.

36. Comment: A few comments expressed that livestock grazing may have reduced competition from grasses on special status species sites, thus resulting in improved habitat for the special status plant species.

Response: Very little native bunchgrass has been observed growing on most of the volcanic ash substrates supporting the special status plants, primarily because the loose and/or shallow ash-tuff is not a suitable growing medium for the native bunchgrasses. Where remnants of native grasses are found in the low seral areas in the ACEC, exotic invaders such as cheatgrass and Russian thistle, rather than the special status plant species, appear to have replaced most of the grasses. In addition, there are no pre- and post-grazing study plots which would indicate whether or not the plants have increased as a **result** of possible reduced competition from livestock grazing of the limited numbers of native bunchgrasses on the special status plant sites.

Noxious Weeds

37. Comment: Several comments expressed disapproval of weed control using man-made chemicals. In addition, one comment wished to see only hand pumps used if chemical application were made.

Response: The threat of noxious weeds to special status plants calls for an integrated control strategy which includes a combination of manual and chemical control methods. The habit of spreading by rhizomes of several of the weed species limits the effectiveness of mechanical control methods. Any herbicide used will be EPA-approved, will be applied in conformance with IMP, and, as stated in the EA, will be applied using extreme caution. For best resource protection, we wish to keep all options available for noxious weed control.

Special Status Plants

38. Comment: A concern was expressed that outplanting of special status species into suitable habitat is frequently not a viable technique and would require consultation with other experts.

Response: The proposed decision has been modified to state that, if species appear to be immediately threatened with extinction and outplantings are to be done, consultation with botanists/ecologists from the US. Fish and Wildlife Service, Oregon Department of Agriculture, and other experts would be made for assistance in the plantings.

39. Comment: One comment suggested that instead of eliminating horse and cattle use, BLM use fences, tanks and build trailhead facilities away from special status plants to restore the riparian area and protect the special status plant species.

Response: There are no riparian areas in the ACEC. **Exclosure** fences for special status plants would not meet IMP. The only trailhead in the proposed plan will be for the Owyhee Breaks trail, which will be located away from special status plant sites. However, because of concerns about the introduction and spread of noxious weeds within the ACEC, there would still be a conflict between special status plants and livestock use.

Wildlife

40. Comment: A few comments were received regarding bighorn sheep transplant base camp operations. Those included a request for clarification where on BOR lands base camp operations would be conducted, a request to modify the text to provide for BOR evaluation and approval of base operation sites on BOR withdrawn lands, and **ODFW's** need for flexibility in selecting base camp sites.

Response: The only BOR withdrawn lands available for bighorn sheep transplant operations will be on existing disturbed areas. The modification to provide for BOR evaluation and approval of base operation sites on BOR withdrawn lands has been made in the proposed plan.

Base camp for bighorn sheep capture may be located at sites other than Slocum Creek Campground if BLM is notified and approval given in advance. An assessment of environmental impacts will then be conducted and sensitive areas avoided. Under the Bighorn Sheep MOU between Vale District and

ODFW, ODFW will notify BLM about bighorn sheep transplant operations on public lands in advance. Flexibility will be provided while avoiding impacts to special status plants and other resource values.

Response: An inventory has been made at the Einstein rock climbing site and associated access routes, and no special status plant species have been observed.

Recreation

41. Comment: One person prefers the BLM collect a day use or entry fee for the area.

Response: Federal law presently does not allow BLM to collect a general day use or entry fee for individual vehicles or parties. A camping fee may be implemented at Slocum Creek campground, since the site meets the minimum federal requirements under the Land and Water Conservation Act to charge for camping activities.

42. Comment: One person wants Recreation Opportunity Spectrum (ROS) objectives for the **WSAs** defined, based on the ROS inventory.

Response: The proposed plan's recreation management objective statement is clarified to retain the primitive and semi-primitive nonmotorized opportunities in the same areas identified with the ROS inventory. Except directly adjacent to the **Leslie** Gulch road, which are influenced by the sight and sounds of vehicles of the semiprimitive nonmotorized area, the three **WSAs** will be managed as a primitive setting. Adjacent to the road the management objective is to manage the setting as semiprimitive nonmotorized.

43. Comment: One agency stated the MOU with BLM for administering BOR withdrawn lands within Leslie Gulch will soon be appropriately updated and modified in a manner which reflects BOR resource management concerns at Leslie Gulch.

Response: The proposed plan provides for revision of the MOU as mutually agreed by the two agencies. The BOR Owyhee Reservoir Final Resource Management Plan (1994) adopts the **BLM's** proposed management actions on BOR withdrawn land, as described in the **ACEC's** proposed plan. The BLM will continue to coordinate with BOR to insure that both agencies agree on management direction for this unique resource.

Rock Climbing

44. Comment: One comment expressed concern that rock climbers may be impacting special status plant sites.

45. Comment: One person would like to see a parking area with a restroom near the climbing site so people can enjoy watching rock climbers, and to give climbers a place to park.

Response: There will be no developed climbing sites adjacent to the Leslie Gulch Road. Development of a parking area near the "Einstein" climbing site would require approximately one quarter mile of new road development into the Upper Leslie Gulch WSA. The road construction would not be in compliance with the IMP for **WSAs**. The proposed parking site with restroom in the Dago Gulch vicinity would accommodate both climbers and other visitors. Alternatively, parking will be provided at the mouth of upper Leslie Gulch canyon along the existing main access road. Climbing activities may be observed by walking the approximate quarter mile from the existing main Leslie Gulch road or Dago Gulch area.

46. Comment: One person asked how a fixed anchor climbing route could be closed once a fixed anchor of the associated climbing route becomes unsafe.

Response: Should a specific unsafe fixed anchor not be accessible, then fixed anchors of the associated climb route leading to, and where possible, from the unsafe anchor will be mitigated or removed. Access to and use of the unsafe anchor would be precluded. Any remaining fixed anchors on the rock wall are expected to be few and substantially unnoticeable.

Where an unsafe fixed anchor is accessible, options for mitigation are various. Should an entire bolt with its hanger not be removed for environmental reasons, then the hanger affixed to the anchor bolt may be altered so it can not accept other climbing hardware. The head of an anchor bolt may be cut off, which leaves only a bolt's shank in the **rock**. An entire **bolt** will be removed if damage to the rock surface can be avoided or minimized. The objective when closing a climbing route is to preclude future use of fixed anchors associated with the route in the least damaging manner to the rock.

47. Comment: One person stated there should be a prohibition on the use of any tools (including wire brushes, screwdrivers, hammers, etc.) for the artificial "cleaning" of climbing routes. Another

person agreed, and further stated the BLM should establish and monitor precise standards for the mitigation of chalk.

Response: The proposed plan is clarified to require that tools and techniques to clean hand/foot holds must leave **no** scarring of the rock surface. BLM authorization prior to removal or other mitigation of fixed anchors provides for evaluation to help minimize impacts to natural features. The plan incorporates specific measures for the **mitigation** of chalk use. Refer to the proposed plan's Recreation section, under Rock Climbing, for additional details. Monitoring of rock climbing will be conducted along with other uses within the ACEC.

48. Comment: One person stated that voluntary compliance for the reporting and mitigation of fixed anchors, with or without removal and mitigation standards, will not succeed. Those who installed the original hardware should either remove it or post a bond to allow for its future removal.

Response: The proposed plan requires a staged removal of fixed anchors by the rock climbers over a five year period. Inadequate cooperation from rock climbers in meeting this action would result in immediate closure to climbing routes associated with fixed anchors. It is imperative that rock climbers take a highly responsible and active role in cooperatively managing their activities with BLM, at the risk of, otherwise, prematurely losing the opportunity to participate in sport rock climbing in the ACEC.

49. Comment: One person indicated the issue of visitor safety cannot be left to the subjective hunches of those who installed the hardware, much less to future climbers who will have little knowledge of the original installation.

Response: Rock climbing, among other uses on the public lands, is an inherently high risk type of activity. The responsibility and liability of undertaking inherently high risk activities on public lands rest fully with the public land visitor(s) choosing to participate.

50. Comment: One group commented that the prohibition of climbing within any **part** of a WSA conflicts with the opportunity for the public to use the area for recreation and that limiting climbing to Einstein would cause over use of the area.

Response: The ACEC remains open to rock climbing as long as fixed anchors and artificial hand holds are not used. Although enjoyment of sport rock climbing with fixed anchors may be enhanced when performed

outdoors in a natural setting, pursuit of the activity or it's enjoyment does not require wilderness characteristics. While the placement of fixed anchors is preferred for safety, the establishment of climbing routes with fixed anchors within **WSAs**, considered permanent installations under the IMP, are not a minimum requirement to enjoy wilderness values and are not in compliance with the IMP. Continued placement of fixed anchors and artificial hand holds would cause accumulative impacts to the wilderness value of naturalness, and likely impact some outstanding opportunities for solitude with other WSA visitors in the ACEC.

Dispersed Recreation

51. Comment: One person asked how and where back country access permits would be issued.

Response: While details for administering the issuance of back country access permits are not yet established, there are multiple options in how it could be conducted. Data derived from surveying and monitoring public use will be used to determine when and how a permit system is implemented. At a minimum, permits may be issued by BLM employees performing duties in the ACEC and at the Vale **District** BLM office.

52. Comment: There was a comment that recreational horse use should be retained for hunters.

Response: Because the Leslie Gulch ACEC is relatively small and all areas are accessible from Leslie **Gulch** Road, there will not be undue hardship on hunters. The public land outside the ACEC boundaries will still be open for recreational horse use. Recreational horse use will be eliminated from the ACEC because it is one of the vectors for weed seed dispersal.

53. Comment: There were a few comments asking how rock climbers would be directed away from known **raptor** nests, bat roosts, and bighorn sheep lambing sites.

Response: If conflicts occur between sensitive wildlife species and rock climbing or other recreational activities, the affected users will be notified of the conflict and when the area will be restricted or closed. Notices may be placed where public announcements are posted in the ACEC and in the Leslie Gulch brochure. Areas will be patrolled to enforce any closure.

54. Comment: One person stated that, since only day use outside of the Slocum Creek campground is allowable, the BLM must monitor the activities.

Response: Monitoring of resources and public use in the ACEC is provided for in the proposed plan. Refer to the proposed plan's Monitoring section for additional information. The day use limitation will be enforced.

Special Use Permits

55. Comment: One person asked what constitutes an organized group.

Response: The term "organized group" was used in the December, 1993 EA document when analyzing impacts on recreation (page 56). This was an inaccurate term to use. The revised EA has been changed to read, "Any activities requiring a special use permit which normally limits group size to a maximum of six persons would result in less impact to natural values and less social contact between groups within the ACEC."

Developed Recreation Facilities

55. Comment: A couple of comments stated they do not favor greatly expanding camping in the ACEC. Another person stated overnight camping should accommodate the hunting and fishing public.

Response: The proposed plan limits camping within the ACEC to the existing Slocum Creek campground area. Visitors who wish to camp in the ACEC may do so at the Slocum Creek campground. Public land outside of the ACEC is available for dispersed camping.

57. Comment: A couple of people asked for clarification of the extent of development at Slocum Creek campground. Another comment expressed that limiting the stay at **Slocum** Creek campground to no more than five days may **help** reduce the area's use.

Response: Further detail on campground development is described in the Recreation section of the proposed plan, under Developed Recreation Facilities.

Visitors seldom stay the existing 14 day maximum camping limit because the lack of potable water is a limiting factor. The proposed plan provides for shortening the maximum camping stay should monitoring of camping use indicate there is no significant impact on resource values.

58. Comment: One comment stated they do not support picnic site development in an undisturbed area on BOR withdrawn land near the boat ramp.

Response: Additional discussion with the BOR has **resulted** in excluding this action in the proposed plan. Mitigation of impacts on soil and vegetation on the knoll south of the boat ramp will be conducted without any facility developments.

Wilderness

59. Comment: One person stated that the Leslie Gulch Road runs through proposed wilderness.

Response: No roads are within BLM proposed wilderness areas. The Leslie Gulch Road is used to delineate a boundary for establishing wilderness study areas. The **oregon** statewide wilderness EIS and study report provided analysis of wilderness values including any opportunities for enhancement of wilderness values including boundary adjustments.

60. Comment: One person asked if wilderness designation would cause intolerable levels of public attraction and use in the area.

Response: It is difficult to project what degree of increased use in the ACEC may result from wilderness designation. Wilderness designation is outside the **scope** of the proposed plan, since designation depends on Congressional action. The proposed ACEC plan is designed to allow for expected increased visitor use without encouraging it.

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